



Lea County, NM (NAD 27 NME)
Lomas Rojas 26 State Com #703H
H&P 260
Plan #6

PROJECT DETAILS: Lea County, NM (NAD 27 NME)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Elevation: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #703H

Ground Level: 3344.0
KB= 25 @ 2388.00ft (H&P 260)
Northing: 403431.00
Easting: 745481.00
Latitude: 32° 6' 23.999 N
Longitude: 103° 32' 25.935 W

SECTION DETAILS

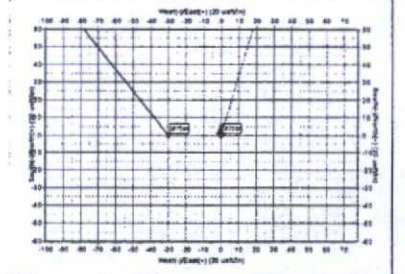
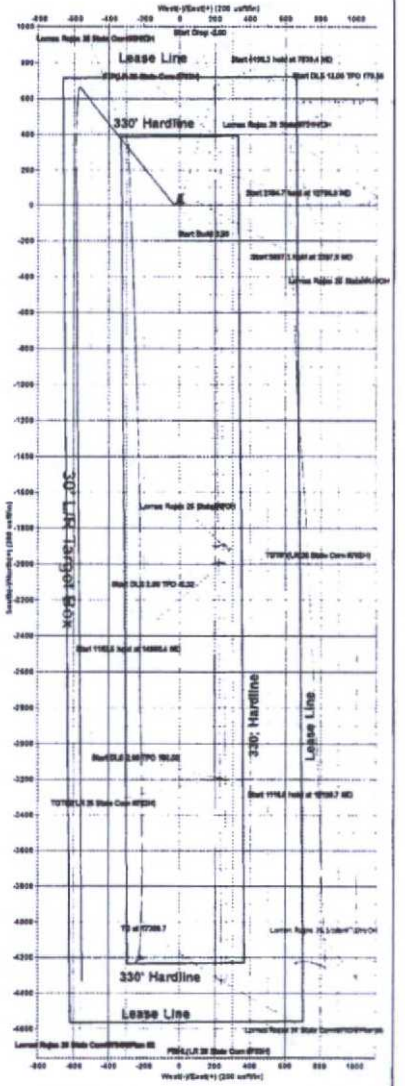
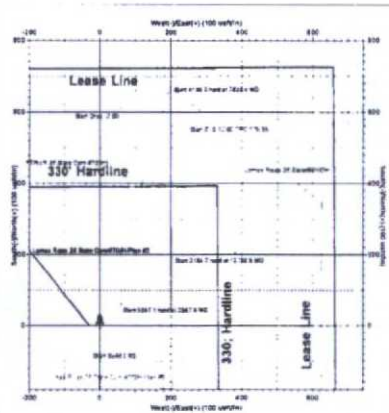
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1250.0	0.00	0.00	1250.0	0.0	0.0	0.00	0.00	0.0	
3	2397.9	6.89	16.40	2395.1	66.1	19.5	0.60	16.40	-64.9	
4	7495.0	6.89	16.40	7455.5	652.5	192.1	0.00	0.00	-64.0	
5	7839.4	0.00	0.00	7799.0	672.3	197.9	2.00	180.00	-660.5	
6	12035.7	0.00	0.00	11895.3	672.3	197.9	0.00	0.00	-660.5	
7	12786.9	90.15	179.55	12472.8	193.6	201.6	12.00	179.55	-182.3	
8	14871.6	90.15	179.55	12467.0	-1991.0	218.7	0.00	0.00	2000.0	TGT#1(LR 26 State Com #703H)
9	14990.4	90.53	179.55	12466.9	-2009.8	218.8	2.00	-0.32	2018.8	
10	16173.0	90.53	179.55	12455.0	-3192.3	228.1	0.00	0.00	3200.0	TGT#2(LR 26 State Com #703H)
11	16199.7	89.99	179.55	12455.9	-3219.0	228.3	2.00	180.00	3226.7	
12	17309.7	89.99	179.55	12456.0	-4329.0	237.0	0.00	0.00	4335.5	PBHL(LR 26 State Com #703H)

CASING DETAILS

No casing data is available

WELLSBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
PBHL(LR 26 State Com #703H)	12456.0	-4329.0	237.0	389102.00	745716.00
TGT#1(LR 26 State Com #703H)	12466.9	-3192.3	228.1	400229.70	745719.09
TGT#2(LR 26 State Com #703H)	12467.0	-1991.0	218.7	401440.00	745699.88
FTP(LR 26 State Com #703H)	12472.0	-392.0	290.0	403623.00	745681.50



DEC 31 2015 1/4/160



EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Lomas Rojas 26 State Com

#703H

OH

Plan #6

Anticollision Report

21 December, 2015



EOG Resources, Inc.

Anticollision Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 27 NME)
 Reference Site: Lomas Rojas 26 State Corn
 Site Error: 0.0 usft
 Reference Well: #703H
 Well Error: 0.0 usft
 Reference Wellbore: OH
 Reference Design: Plan #6

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB= 25 @ 3369.0usft (H&P 260)
 MD Reference: KB= 25 @ 3369.0usft (H&P 260)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM 5000.1 Single User Db
 Offset TVD Reference: Reference Datum

Reference	Plan #6
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 500.0 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic
Casing Method:	Not applied

Survey Tool Program Date 12/21/2015

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	17,309.4	Plan #6 (OH)	MWD	MWD - Standard

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Brown Bear 36 State						
#701H - OH - OH						Out of range
Lomas Rojas 26 State						
#4H - OH - OH						Out of range
#501H - OH - OH						Out of range
#502H - OH - OH						Out of range
#5H - OH - OH						Out of range
#6 - OH - OH						Out of range
#701H - OH - OH						Out of range
#702H - OH - OH						Out of range
Lomas Rojas 26 State Corn						
#3H - OH - OH						Out of range
#704H - OH - Plan #3	1,116.3	1,117.3	30.0	25.3	6.330	CC
#704H - OH - Plan #3	1,250.0	1,250.8	30.1	24.8	5.646	ES
#704H - OH - Plan #3	1,400.0	1,400.3	32.6	26.6	5.428	SF

Offset Design												Lomas Rojas 26 State Com - #704H - OH - Plan #3		Offset Site Error: 0.0 usft	
Survey Program: 0-MWD														Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	1.0	0.0	0.0	0.0	-90.01	0.0	-30.0	30.0						
100.0	100.0	101.0	100.0	0.1	0.1	-90.01	0.0	-30.0	30.0	29.8	0.17	175.621			
200.0	200.0	201.0	200.0	0.3	0.3	-90.01	0.0	-30.0	30.0	29.4	0.62	48.359			
300.0	300.0	301.0	300.0	0.5	0.5	-90.01	0.0	-30.0	30.0	28.9	1.07	28.040			
400.0	400.0	401.0	400.0	0.6	0.8	-90.01	0.0	-30.0	30.0	28.5	1.52	19.744			
500.0	500.0	501.0	500.0	1.0	1.0	-90.01	0.0	-30.0	30.0	28.0	1.97	15.237			
600.0	600.0	601.0	600.0	1.2	1.2	-90.01	0.0	-30.0	30.0	27.6	2.42	12.404			
700.0	700.0	701.0	700.0	1.4	1.4	-90.01	0.0	-30.0	30.0	27.1	2.87	10.460			
800.0	800.0	801.0	800.0	1.7	1.7	-90.01	0.0	-30.0	30.0	26.7	3.32	9.043			
900.0	900.0	901.0	900.0	1.9	1.9	-90.01	0.0	-30.0	30.0	26.2	3.77	7.964			
1,000.0	1,000.0	1,001.0	1,000.0	2.1	2.1	-90.01	0.0	-30.0	30.0	25.8	4.22	7.115			
1,100.0	1,100.0	1,101.0	1,100.0	2.3	2.3	-90.01	0.0	-30.0	30.0	25.3	4.67	6.429			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Reference Datum

Offset Design Lomas Rojas 26 State Com - #704H - OH - Plan #3														Offset Site Error: 0.0 usft
Survey Program: 0-MWD														Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
1,116.3	1,116.3	1,117.3	1,116.3	2.4	2.4	-90.01	0.0	-30.0	30.0	25.3	4.74	6.330 CC		
1,200.0	1,200.0	1,201.0	1,200.0	2.6	2.6	-90.01	0.0	-30.0	30.0	24.9	5.12	5.864		
1,250.0	1,250.0	1,250.8	1,249.8	2.7	2.7	-89.68	0.2	-30.1	30.1	24.8	5.34	5.646 ES		
1,300.0	1,300.0	1,300.7	1,299.7	2.8	2.8	-105.36	0.7	-30.6	30.6	25.0	5.56	5.503		
1,400.0	1,400.0	1,400.3	1,399.2	3.0	3.0	-103.59	2.7	-32.2	32.6	26.6	6.00	5.428 SF		
1,500.0	1,500.0	1,500.0	1,498.9	3.2	3.2	-101.62	6.1	-34.9	36.0	29.5	6.44	5.586		
1,600.0	1,599.9	1,599.2	1,597.9	3.5	3.4	-99.73	10.8	-38.7	40.9	34.0	6.88	5.935		
1,700.0	1,699.8	1,698.7	1,697.1	3.7	3.7	-98.15	18.8	-43.5	47.1	39.8	7.33	6.424		
1,800.0	1,799.7	1,798.5	1,796.5	3.9	3.9	-97.79	23.0	-48.6	53.7	45.9	7.78	6.903		
1,900.0	1,899.5	1,898.2	1,896.0	4.1	4.1	-98.48	29.3	-53.6	60.5	52.3	8.24	7.343		
2,000.0	1,999.2	1,998.0	1,995.4	4.4	4.4	-99.91	35.5	-58.6	67.5	58.8	8.71	7.750		
2,100.0	2,098.9	2,097.7	2,094.8	4.6	4.6	-101.85	41.8	-63.7	74.7	65.5	9.18	8.137		
2,200.0	2,198.4	2,197.3	2,194.1	4.8	4.9	-104.15	48.0	-68.7	82.2	72.6	9.66	8.512		
2,300.0	2,297.9	2,297.0	2,293.4	5.1	5.1	-106.69	54.3	-73.7	90.1	80.0	10.15	8.884		
2,397.9	2,395.1	2,394.4	2,390.5	5.4	5.4	-109.32	60.4	-78.7	98.4	87.8	10.64	9.262		
2,400.0	2,397.2	2,396.5	2,392.6	5.4	5.4	-109.38	60.5	-78.8	98.6	87.9	10.65	9.260		
2,500.0	2,496.5	2,495.0	2,491.8	5.6	5.6	-111.93	66.7	-83.8	107.4	96.2	11.15	9.632		
2,600.0	2,595.8	2,595.5	2,591.0	5.9	5.9	-114.10	72.9	-88.8	116.4	104.7	11.66	9.984		
2,700.0	2,695.1	2,695.0	2,690.2	6.2	6.1	-115.95	79.2	-93.8	125.5	113.4	12.17	10.315		
2,800.0	2,794.3	2,794.5	2,789.3	6.4	6.4	-117.55	85.4	-98.9	134.8	122.1	12.68	10.627		
2,900.0	2,893.6	2,894.0	2,888.5	6.7	6.6	-118.94	91.6	-103.9	144.1	130.9	13.20	10.920		
3,000.0	2,992.9	2,993.5	2,987.7	7.0	6.9	-120.17	97.9	-108.9	153.5	139.8	13.71	11.195		
3,100.0	3,092.2	3,093.0	3,086.9	7.3	7.2	-121.25	104.1	-113.9	163.0	148.7	14.23	11.454		
3,200.0	3,191.4	3,192.5	3,186.1	7.6	7.4	-122.21	110.3	-119.0	172.5	157.8	14.75	11.696		
3,300.0	3,290.7	3,292.0	3,285.3	7.8	7.7	-123.07	116.6	-124.0	182.1	166.8	15.27	11.924		
3,400.0	3,390.0	3,391.5	3,384.4	8.1	7.9	-123.85	122.8	-129.0	191.7	175.9	15.79	12.139		
3,500.0	3,489.3	3,491.1	3,483.5	8.4	8.2	-124.55	129.0	-134.0	201.3	185.0	16.31	12.341		
3,600.0	3,588.6	3,590.6	3,582.8	8.7	8.4	-125.19	135.3	-139.1	211.0	194.1	16.83	12.532		
3,700.0	3,687.8	3,690.1	3,682.0	9.0	8.7	-125.77	141.5	-144.1	220.6	203.3	17.36	12.712		
3,800.0	3,787.1	3,789.6	3,781.2	9.3	9.0	-126.30	147.7	-149.1	230.4	212.5	17.88	12.882		
3,900.0	3,886.4	3,889.1	3,880.4	9.6	9.2	-126.79	154.0	-154.1	240.1	221.7	18.41	13.043		
4,000.0	3,985.7	3,988.6	3,979.5	9.9	9.5	-127.24	160.2	-159.2	249.8	230.9	18.93	13.196		
4,100.0	4,085.0	4,088.1	4,078.7	10.2	9.7	-127.66	166.4	-164.2	259.6	240.1	19.46	13.341		
4,200.0	4,184.2	4,187.6	4,177.9	10.5	10.0	-128.05	172.7	-169.2	269.3	249.4	19.98	13.478		
4,300.0	4,283.5	4,287.1	4,277.1	10.8	10.3	-128.41	178.9	-174.2	279.1	258.6	20.51	13.609		
4,400.0	4,382.8	4,386.6	4,376.3	11.1	10.5	-128.74	185.1	-179.3	288.9	267.9	21.04	13.734		
4,500.0	4,482.1	4,486.1	4,475.5	11.4	10.8	-129.06	191.4	-184.3	298.7	277.1	21.56	13.852		
4,600.0	4,581.3	4,585.6	4,574.6	11.7	11.0	-129.35	197.6	-189.3	308.5	286.4	22.09	13.965		
4,700.0	4,680.6	4,685.1	4,673.8	12.0	11.3	-129.63	203.8	-194.3	318.3	295.7	22.62	14.073		
4,800.0	4,779.9	4,784.6	4,773.0	12.3	11.6	-129.89	210.0	-199.4	328.1	305.0	23.15	14.176		
4,900.0	4,879.2	4,884.1	4,872.2	12.6	11.8	-130.13	216.3	-204.4	338.0	314.3	23.67	14.275		
5,000.0	4,978.5	4,983.6	4,971.4	12.9	12.1	-130.36	222.5	-209.4	347.8	323.6	24.20	14.370		
5,100.0	5,077.7	5,083.2	5,070.6	13.2	12.3	-130.58	228.7	-214.4	357.6	332.9	24.73	14.460		
5,200.0	5,177.0	5,182.7	5,169.7	13.5	12.6	-130.79	235.0	-219.5	367.5	342.2	25.26	14.547		
5,300.0	5,276.3	5,282.2	5,268.9	13.8	12.9	-130.98	241.2	-224.5	377.3	351.5	25.79	14.630		
5,400.0	5,375.6	5,381.7	5,368.1	14.1	13.1	-131.17	247.4	-229.5	387.2	360.8	26.32	14.710		
5,500.0	5,474.9	5,481.2	5,467.3	14.4	13.4	-131.34	253.7	-234.5	397.0	370.2	26.85	14.787		
5,600.0	5,574.1	5,580.7	5,566.5	14.7	13.7	-131.51	259.9	-239.6	406.9	379.5	27.38	14.861		
5,700.0	5,673.4	5,680.2	5,665.7	15.0	13.9	-131.67	266.1	-244.6	416.7	388.8	27.91	14.932		
5,800.0	5,772.7	5,779.7	5,764.9	15.3	14.2	-131.82	272.4	-249.6	426.6	398.2	28.44	15.001		
5,900.0	5,872.0	5,879.2	5,864.0	15.6	14.4	-131.97	278.6	-254.6	435.5	407.5	28.97	15.067		
6,000.0	5,971.2	5,978.7	5,963.2	15.9	14.7	-132.11	284.8	-259.7	445.3	416.8	29.50	15.130		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



EOG Resources, Inc.

Anticollision Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Reference Site: Lomas Rojas 26 State Com
Site Error: 0.0 usft
Reference Well: #703H
Well Error: 0.0 usft
Reference Wellbore: OH
Reference Design: Plan #6

Local Co-ordinate Reference: Well #703H
TVD Reference: KB= 25 @ 3369.0usft (H&P 260)
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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.1 Single User Db
Offset TVD Reference: Reference Datum

Offset Design Lomas Rojas 26 State Com - #704H - OH - Plan #3													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
6,100.0	6,070.5	6,078.2	6,062.4	16.2	15.0	-132.24	291.1	-264.7	456.2	426.2	30.03	15.192		
6,200.0	6,168.8	6,177.7	6,161.6	16.5	15.2	-132.37	297.3	-269.7	466.1	435.5	30.56	15.251		
6,300.0	6,269.1	6,277.2	6,260.8	16.8	15.5	-132.49	303.5	-274.7	476.0	444.9	31.09	15.309		
6,400.0	6,368.4	6,376.7	6,360.0	17.1	15.8	-132.61	309.8	-279.8	485.8	454.2	31.62	15.364		
6,500.0	6,467.6	6,476.2	6,459.1	17.4	16.0	-132.72	316.0	-284.8	495.7	463.6	32.15	15.418		