

S:\SURVEY\EOG ARTESIA\GAUNTLET 30 STATE COM\FINAL PRODUCTS\LO GAUNTLET 30 STATE COM 402H.DWG 10/7/2019 2:34:20 PM rdominguez



Total Directional
Services, LLC

USA Operations

MWD Survey Certification

Eddy County, NM

Client: EOG Resources

Well Name: Gauntlet 30 State Com #402H

Total Job No: 2019-871-A20

API No: 30-015-46367

Start Depth: 1,303' feet MD

End Depth: 13,293' feet MD

Start Date: December 10, 2019

End Date: December 18, 2019

RECEIVED

FEB 03 2020

EMNRD-OCD ARTESIA

I, Istvan Tot Bojnik, certify that; I am employed by Total Directional Services, LLC. On 12/10/2019 through 12/18/2019, we conducted or supervised the taking of the MWD surveys from a measured depth of 1,303 feet to a measured depth of 13,293 feet. The data is true, correct, complete and within the limitations of the tool as set forth by Total Directional Services, LLC. I am authorized and qualified to make this report and this/these survey(s) was/were conducted at the request of EOG Resources for the well Gauntlet 30 State Com #402H, API No: 30-015-46367 in Eddy County, NM. I have reviewed this report and find that it conforms to the principals and procedures as set forth by Total Directional Services, LLC.

Istvan Tot Bojnik 12/18/2019



EOG Resources

Eddy County, NM (NAD 83 - Grid)
Gauntlet 30 State Com
Gauntlet 30 State Com #402H

OH

Design: OH

Standard Survey Report

03 January, 2020

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FEB 03 2020

EMNRD-OCD ARTESIA





Total Directional Services Survey Report



Company:	EOG Resources	Local Co-ordinate Reference:	Well Gauntlet 30 State Com #402H
Project:	Eddy County, NM (NAD 83 - Grid)	TVD Reference:	17' KB + 3558' GE @ 3575.00usft
Site:	Gauntlet 30 State Com	MD Reference:	17' KB + 3558' GE @ 3575.00usft
Well:	Gauntlet 30 State Com #402H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

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

Site	Gauntlet 30 State Com	
Site Position:		Northing: 627,551.00 usft
From: Map		Easting: 491,885.00 usft
Position Uncertainty:	0.00 usft	Slot Radius: 13-3/16 "
		Latitude: 32.725074
		Longitude: -104.494142
		Grid Convergence: -0.09 °

Well	Gauntlet 30 State Com #402H	
Well Position	+N/-S 0.00 usft	Northing: 627,581.00 usft
	+E/-W 0.00 usft	Easting: 491,884.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation: usft
		Latitude: 32.725157
		Longitude: -104.494146
		Ground Level: 3,558.00 usft

Wellbore	OH	
Magnetics	Model Name	Sample Date
	Declination (°)	Dip Angle (°)
		Field Strength (nT)
	IGRF2015	12/3/2019
	7.15	60.34
		47,880.53178991

Design	OH	
Audit Notes:		
Version:	1.0	Phase: ACTUAL
		Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)
		+E/-W (usft)
		Direction (°)
	0.00	0.00
		0.00
		269.68

Survey Program	Date	1/3/2020	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
145.00	13,222.00	Survey #1 (OH)	OWSG (REV2) MWD
13,293.00	13,293.00	Survey #2 (OH)	BLIND
			Description
			OWSG MWD - Standard
			OWSG BLIND

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (Gauntlet 30 State Com #402H)									
145.00	0.60	248.00	145.00	-0.28	-0.70	0.71	0.41	0.41	0.00
319.00	0.80	142.00	318.99	-1.58	-0.80	0.81	0.65	0.11	-60.92
503.00	1.30	91.00	502.96	-2.63	2.08	-2.06	0.55	0.27	-27.72
534.00	0.70	119.00	533.96	-2.73	2.59	-2.58	2.44	-1.94	90.32
660.00	1.00	114.00	659.94	-3.55	4.27	-4.25	0.25	0.24	-3.97
755.00	1.10	66.00	754.93	-3.52	5.86	-5.84	0.90	0.11	-50.53
849.00	1.10	101.00	848.91	-3.32	7.57	-7.55	0.70	0.00	37.23
975.00	0.70	108.00	974.90	-3.79	9.49	-9.47	0.33	-0.32	5.56



Total Directional Services

Survey Report



Company:	EOG Resources	Local Co-ordinate Reference:	Well Gauntlet 30' State Com #402H
Project:	Eddy County, NM (NAD 83 - Grid)	TVD Reference:	17' KB + 3558' GE @ 3575.00usft
Site:	Gauntlet 30' State Com	MD Reference:	17' KB + 3558' GE @ 3575.00usft
Well:	Gauntlet 30' State Com #402H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM-5000.15 Single User Db

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)
1,133.00	0.60	66.00	1,132.89	-3.75	11.17	-11.14	0.30	-0.06	-26.58
1,309.00	0.80	131.00	1,308.88	-4.18	12.93	-12.91	0.44	0.11	36.93
1,354.00	0.90	121.90	1,353.87	-4.58	13.47	-13.45	0.37	0.22	-20.22
1,448.00	0.80	123.30	1,447.86	-5.33	14.65	-14.62	0.11	-0.11	1.49
1,543.00	3.10	101.70	1,542.80	-6.21	17.72	-17.68	2.50	2.42	-22.74
1,638.00	5.60	93.30	1,637.52	-7.00	24.86	-24.82	2.71	2.63	-8.84
1,733.00	5.80	93.20	1,732.05	-7.53	34.28	-34.24	0.21	0.21	-0.11
1,827.00	5.80	94.80	1,825.57	-8.20	43.76	-43.71	0.17	0.00	1.70
1,922.00	5.60	79.30	1,920.11	-7.74	53.09	-53.05	1.63	-0.21	-16.32
2,015.00	5.90	79.40	2,012.64	-6.02	62.25	-62.22	0.32	0.32	0.11
2,108.00	5.90	88.60	2,105.15	-5.02	71.73	-71.70	1.02	0.00	9.89
2,204.00	5.90	88.40	2,200.64	-4.76	81.59	-81.57	0.02	0.00	-0.21
2,297.00	5.60	88.40	2,293.17	-4.50	90.91	-90.88	0.32	-0.32	0.00
2,390.00	5.50	90.90	2,385.73	-4.44	99.90	-99.87	0.28	-0.11	2.69
2,485.00	5.50	92.10	2,480.30	-4.68	109.00	-108.97	0.12	0.00	1.26
2,580.00	5.20	92.50	2,574.88	-5.04	117.85	-117.82	0.32	-0.32	0.42
2,674.00	5.10	92.00	2,668.50	-5.37	126.28	-126.25	0.12	-0.11	-0.53
2,769.00	4.80	91.70	2,763.15	-5.63	134.48	-134.44	0.32	-0.32	-0.32
2,864.00	4.80	92.00	2,857.82	-5.89	142.42	-142.39	0.03	0.00	0.32
2,958.00	4.60	95.10	2,951.50	-6.36	150.11	-150.07	0.34	-0.21	3.30
3,052.00	4.60	94.90	3,045.20	-7.02	157.62	-157.57	0.02	0.00	-0.21
3,147.00	4.30	97.20	3,139.91	-7.79	164.94	-164.90	0.37	-0.32	2.42
3,239.00	4.10	95.80	3,231.66	-8.56	171.64	-171.59	0.24	-0.22	-1.52
3,334.00	4.00	95.00	3,326.43	-9.19	178.32	-178.26	0.12	-0.11	-0.84
3,426.00	3.80	97.20	3,418.21	-9.85	184.54	-184.48	0.27	-0.22	2.39
3,521.00	4.70	90.80	3,512.95	-10.30	191.55	-191.49	1.07	0.95	-6.74
3,616.00	4.60	89.50	3,607.64	-10.32	199.26	-199.20	0.15	-0.11	-1.37
3,710.00	4.20	88.10	3,701.36	-10.17	206.47	-206.41	0.44	-0.43	-1.49
3,804.00	5.00	91.90	3,795.06	-10.20	214.00	-213.94	0.91	0.85	4.04
3,898.00	5.00	90.70	3,888.70	-10.38	222.19	-222.13	0.11	0.00	-1.28
3,992.00	4.80	91.30	3,982.36	-10.52	230.22	-230.16	0.22	-0.21	0.64
4,086.00	4.50	93.20	4,076.05	-10.82	237.83	-237.77	0.36	-0.32	2.02
4,179.00	4.50	92.50	4,168.76	-11.18	245.12	-245.05	0.06	0.00	-0.75
4,272.00	4.30	89.20	4,261.49	-11.29	252.25	-252.18	0.35	-0.22	-3.55
4,367.00	4.10	90.70	4,356.23	-11.28	259.21	-259.14	0.24	-0.21	1.58
4,461.00	4.00	94.90	4,450.00	-11.60	265.83	-265.77	0.33	-0.11	4.47
4,556.00	3.20	96.90	4,544.81	-12.20	271.77	-271.70	0.85	-0.84	2.11
4,650.00	1.70	80.60	4,638.72	-12.29	275.75	-275.68	1.74	-1.60	-17.34
4,743.00	1.60	70.90	4,731.68	-11.64	278.34	-278.27	0.32	-0.11	-10.43
4,765.00	1.80	66.70	4,753.67	-11.40	278.94	-278.88	1.07	0.91	-19.09
4,860.00	7.80	276.20	4,848.42	-10.11	273.89	-273.83	9.90	6.32	-158.42
4,954.00	23.60	270.30	4,938.64	-9.32	248.57	-248.52	16.87	16.81	-6.28
5,047.00	40.00	268.60	5,017.41	-9.96	199.74	-199.68	17.66	17.63	-1.83



Total Directional Services Survey Report



Company:	EOG Resources	Local Co-ordinate Reference:	Well Gauntlet 30 State Com #402H
Project:	Eddy County, NM (NAD 83 - Grid)	TVD Reference:	17' KB + 3558' GE @ 3575.00usft
Site:	Gauntlet 30 State Com	MD Reference:	17' KB + 3558' GE @ 3575.00usft
Well:	Gauntlet 30 State Com #402H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

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)
5,140.00	45.60	268.80	5,085.62	-11.39	136.60	-136.53	6.02	6.02	0.22
5,235.00	46.70	268.90	5,151.43	-12.76	68.10	-68.03	1.16	1.16	0.11
5,330.00	56.00	268.60	5,210.70	-14.39	-5.99	6.07	9.79	9.79	-0.32
5,424.00	60.60	269.30	5,260.08	-15.84	-85.93	86.02	4.93	4.89	0.74
5,517.00	72.90	272.20	5,296.73	-14.63	-171.20	171.27	13.53	13.23	3.12
5,555.05	76.41	271.25	5,306.79	-13.52	-207.86	207.93	9.53	9.23	-2.49
100' FEL HL Crossing (5555.04' MD)									
5,582.00	78.90	270.60	5,312.56	-13.10	-234.19	234.26	9.53	9.24	-2.42
5,633.00	86.50	267.40	5,319.03	-13.99	-284.72	284.80	16.15	14.90	-6.27
5,726.00	89.50	267.30	5,322.28	-18.29	-377.56	377.65	3.23	3.23	-0.11
5,821.00	91.90	271.00	5,321.12	-19.70	-472.52	472.62	4.64	2.53	3.89
5,916.00	93.50	272.20	5,316.64	-17.05	-567.37	567.45	2.10	1.68	1.26
6,011.00	92.00	272.30	5,312.08	-13.33	-662.18	662.25	1.58	-1.58	0.11
6,106.00	90.40	269.10	5,310.09	-12.17	-757.14	757.20	3.77	-1.68	-3.37
6,202.00	90.30	269.30	5,309.51	-13.51	-853.13	853.19	0.23	-0.10	0.21
6,296.00	89.80	267.70	5,309.43	-15.97	-947.09	947.17	1.78	-0.53	-1.70
6,391.00	91.90	269.00	5,308.02	-18.70	-1,042.04	1,042.12	2.60	2.21	1.37
6,485.00	92.30	268.80	5,304.57	-20.51	-1,135.95	1,136.05	0.48	0.43	-0.21
6,579.00	92.60	268.00	5,300.55	-23.13	-1,229.83	1,229.94	0.91	0.32	-0.85
6,673.00	91.30	270.90	5,297.35	-24.03	-1,323.76	1,323.87	3.38	-1.38	3.09
6,768.00	91.30	271.50	5,295.20	-22.04	-1,418.71	1,418.82	0.63	0.00	0.63
6,862.00	90.20	273.50	5,293.97	-17.94	-1,512.61	1,512.69	2.43	-1.17	2.13
6,954.00	90.60	273.30	5,293.33	-12.48	-1,604.45	1,604.49	0.49	0.43	-0.22
7,048.00	89.50	272.20	5,293.24	-7.97	-1,698.34	1,698.35	1.65	-1.17	-1.17
7,141.00	89.40	271.50	5,294.14	-4.97	-1,791.28	1,791.28	0.76	-0.11	-0.75
7,236.00	89.50	271.50	5,295.05	-2.48	-1,886.25	1,886.23	0.11	0.11	0.00
7,331.00	91.50	271.20	5,294.22	-0.25	-1,981.21	1,981.18	2.13	2.11	-0.32
7,349.54	91.58	271.14	5,293.72	0.13	-1,999.74	1,999.71	0.53	0.43	-0.32
2000' VS TGT (Gauntlet 30 State Com #402H)									
7,425.00	91.90	270.90	5,291.43	1.48	-2,075.15	2,075.11	0.53	0.43	-0.32
7,519.00	92.20	270.60	5,288.07	2.70	-2,169.08	2,169.04	0.45	0.32	-0.32
7,613.00	92.20	270.20	5,284.46	3.36	-2,263.01	2,262.96	0.43	0.00	-0.43
7,708.00	92.20	270.00	5,280.81	3.53	-2,357.94	2,357.89	0.21	0.00	-0.21
7,800.00	92.60	269.40	5,276.96	3.05	-2,449.86	2,449.81	0.78	0.43	-0.65
7,894.00	92.80	268.60	5,272.53	1.41	-2,543.74	2,543.69	0.88	0.21	-0.85
7,989.00	91.30	268.00	5,269.13	-1.41	-2,638.63	2,638.60	1.70	-1.58	-0.63
8,083.00	91.20	267.80	5,267.08	-4.85	-2,732.55	2,732.53	0.24	-0.11	-0.21
8,178.00	91.60	267.50	5,264.76	-8.75	-2,827.44	2,827.45	0.53	0.42	-0.32
8,272.00	90.50	267.80	5,263.04	-12.60	-2,921.34	2,921.37	1.21	-1.17	0.32
8,366.00	90.60	266.70	5,262.14	-17.11	-3,015.23	3,015.28	1.17	0.11	-1.17
8,459.00	90.00	269.20	5,261.65	-20.44	-3,108.16	3,108.23	2.76	-0.65	2.69
8,555.00	90.50	270.30	5,261.23	-20.86	-3,204.16	3,204.22	1.26	0.52	1.15
8,647.00	90.90	270.30	5,260.11	-20.37	-3,296.15	3,296.21	0.43	0.43	0.00
8,742.00	90.30	270.50	5,259.11	-19.71	-3,391.14	3,391.20	0.67	-0.63	0.21



Total Directional Services

Survey Report



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Site:	Gauntlet 30 State Com	MD Reference:	17' KB + 3558' GE @ 3575.00usft
Well:	Gauntlet 30 State Com #402H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

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)
8,837.00	90.60	270.30	5,258.37	-19.05	-3,486.14	3,486.19	0.38	0.32	-0.21
8,931.00	90.90	270.10	5,257.14	-18.72	-3,580.13	3,580.18	0.38	0.32	-0.21
9,025.00	91.30	270.00	5,255.33	-18.64	-3,674.11	3,674.16	0.44	0.43	-0.11
9,120.00	90.40	270.00	5,253.92	-18.64	-3,769.10	3,769.14	0.95	-0.95	0.00
9,215.00	90.80	270.20	5,252.93	-18.47	-3,864.09	3,864.14	0.47	0.42	0.21
9,309.00	91.20	270.00	5,251.29	-18.31	-3,958.08	3,958.12	0.48	0.43	-0.21
9,404.00	91.80	270.30	5,248.80	-18.06	-4,053.04	4,053.08	0.71	0.63	0.32
9,498.00	91.90	269.60	5,245.77	-18.14	-4,147.00	4,147.03	0.75	0.11	-0.74
9,593.00	92.40	269.90	5,242.20	-18.56	-4,241.93	4,241.96	0.61	0.53	0.32
9,686.00	90.60	267.80	5,239.77	-20.42	-4,334.87	4,334.91	2.97	-1.94	-2.26
9,781.00	90.90	267.40	5,238.52	-24.40	-4,429.78	4,429.84	0.53	0.32	-0.42
9,875.00	90.90	266.50	5,237.05	-29.40	-4,523.63	4,523.72	0.96	0.00	-0.96
9,969.00	91.30	265.70	5,235.24	-35.79	-4,617.39	4,617.52	0.95	0.43	-0.85
10,063.00	90.90	268.40	5,233.44	-40.63	-4,711.24	4,711.40	2.90	-0.43	2.87
10,157.00	90.80	270.90	5,232.04	-41.20	-4,805.22	4,805.38	2.66	-0.11	2.66
10,175.76	90.94	271.04	5,231.76	-40.89	-4,823.98	4,824.13	1.06	0.75	0.75
4824' VS TGT (Gauntlet 30 State Com #402H)									
10,250.00	91.50	271.60	5,230.18	-39.18	-4,898.18	4,898.32	1.06	0.75	0.75
10,345.00	91.90	271.60	5,227.36	-36.52	-4,993.10	4,993.23	0.42	0.42	0.00
10,436.00	92.10	270.00	5,224.18	-35.25	-5,084.04	5,084.15	1.77	0.22	-1.76
10,530.00	92.60	268.70	5,220.33	-36.32	-5,177.95	5,178.07	1.48	0.53	-1.38
10,625.00	91.70	268.10	5,216.76	-38.97	-5,272.84	5,272.98	1.14	-0.95	-0.63
10,720.00	90.00	269.90	5,215.35	-40.63	-5,367.81	5,367.95	2.61	-1.79	1.89
10,814.00	90.30	269.70	5,215.11	-40.96	-5,461.81	5,461.95	0.38	0.32	-0.21
10,908.00	91.50	272.00	5,213.63	-39.56	-5,555.78	5,555.91	2.76	1.28	2.45
11,002.00	92.10	272.00	5,210.68	-36.28	-5,649.68	5,649.79	0.64	0.64	0.00
11,097.00	91.40	271.00	5,207.78	-33.80	-5,744.60	5,744.70	1.28	-0.74	-1.05
11,191.00	91.20	270.60	5,205.65	-32.49	-5,838.56	5,838.65	0.48	-0.21	-0.43
11,283.00	91.70	270.60	5,203.32	-31.52	-5,930.53	5,930.61	0.54	0.54	0.00
11,377.00	91.50	270.00	5,200.69	-31.03	-6,024.49	6,024.57	0.67	-0.21	-0.64
11,472.00	91.70	269.10	5,198.04	-31.78	-6,119.45	6,119.53	0.97	0.21	-0.95
11,566.00	92.30	268.60	5,194.76	-33.66	-6,213.37	6,213.46	0.83	0.64	-0.53
11,662.00	91.30	268.50	5,191.74	-36.09	-6,309.29	6,309.40	1.05	-1.04	-0.10
11,752.88	90.34	268.60	5,190.44	-38.39	-6,400.13	6,400.25	1.06	-1.05	0.11
6400' VS TGT (Gauntlet 30 State Com #402H)									
11,757.00	90.30	268.60	5,190.42	-38.49	-6,404.25	6,404.37	1.06	-1.05	0.11
11,852.00	90.60	268.60	5,189.67	-40.81	-6,499.22	6,499.35	0.32	0.32	0.00
11,946.00	90.90	268.50	5,188.44	-43.19	-6,593.18	6,593.32	0.34	0.32	-0.11
12,041.00	91.60	267.90	5,186.37	-46.18	-6,688.11	6,688.26	0.97	0.74	-0.63
12,136.00	92.10	267.80	5,183.30	-49.74	-6,782.99	6,783.17	0.54	0.53	-0.11
12,230.00	92.90	267.80	5,179.20	-53.34	-6,876.84	6,877.03	0.85	0.85	0.00
12,325.00	93.40	268.50	5,173.98	-56.41	-6,971.64	6,971.85	0.90	0.53	0.74
12,420.00	92.30	270.30	5,169.26	-57.40	-7,066.51	7,066.72	2.22	-1.16	1.89



Total Directional Services
Survey Report



Company:	EOG Resources	Local Co-ordinate Reference:	Well Gauntlet 30 State Com #402H
Project:	Eddy County, NM (NAD 83 - Grid)	TVD Reference:	17' KB + 3558' GE @ 3575.00usft
Site:	Gauntlet 30 State Com	MD Reference:	17' KB + 3558' GE @ 3575.00usft
Well:	Gauntlet 30 State Com #402H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

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)
12,515.00	91.30	270.90	5,166.27	-56.40	-7,161.46	7,161.66	1.23	-1.05	0.63
12,608.00	91.70	270.60	5,163.84	-55.19	-7,254.42	7,254.61	0.54	0.43	-0.32
12,703.00	92.40	270.00	5,160.44	-54.69	-7,349.36	7,349.55	0.97	0.74	-0.63
12,798.00	91.10	270.60	5,157.54	-54.19	-7,444.31	7,444.49	1.51	-1.37	0.63
12,893.00	91.50	271.20	5,155.38	-52.70	-7,539.27	7,539.45	0.76	0.42	0.63
12,987.00	92.00	271.30	5,152.51	-50.65	-7,633.21	7,633.37	0.54	0.53	0.11
13,082.00	92.70	271.30	5,148.62	-48.50	-7,728.10	7,728.25	0.74	0.74	0.00
13,177.00	93.40	271.20	5,143.56	-46.43	-7,822.94	7,823.08	0.74	0.74	-0.11
13,222.00	93.70	271.20	5,140.78	-45.49	-7,867.85	7,867.98	0.67	0.67	0.00
13,293.00	93.70	271.20	5,136.20	-44.00	-7,938.68	7,938.80	0.00	0.00	0.00
BHL (Gauntlet 30 State Com #402H) - PBHL (Gauntlet 30 State Com #402H)									

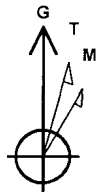
Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL (Gauntlet 30 State (	0.00	360.00	0.00	0.00	0.00	627,581.00	491,884.00	32.725157	-104.494146
- actual wellpath hits target center									
- Point									
BHL (Gauntlet 30 State (	0.00	360.00	5,136.20	-44.00	-7,938.68	627,537.00	483,945.32	32.725000	-104.519960
- actual wellpath misses target center by 0.01usft at 13293.00usft MD (5136.20 TVD, -44.00 N, -7938.68 E)									
- Point									
100' FEL HL Crossing (5	0.00	360.00	5,306.79	-13.52	-207.86	627,567.48	491,676.14	32.725119	-104.494821
- actual wellpath hits target center									
- Point									

Checked By: _____ Approved By: _____ Date: _____

EOG Resources

Project: Eddy County, NM (NAD 83 - Grid)
 Site: Gauntlet 30 State Com
 Well: Gauntlet 30 State Com #402H
 Wellbore: OH
 Design: OH

17' KB + 3558' GE @ 3575.00usft



Azimuths to Grid North
 True North: 0.09°
 Magnetic North: 7.24°
 Magnetic Field
 Strength: 47880.5nT
 Dip Angle: 60.34°
 Date: 12/3/2019
 Model: IGRF2015

PROJECT DETAILS: Eddy County, NM (NAD 83 - Grid)

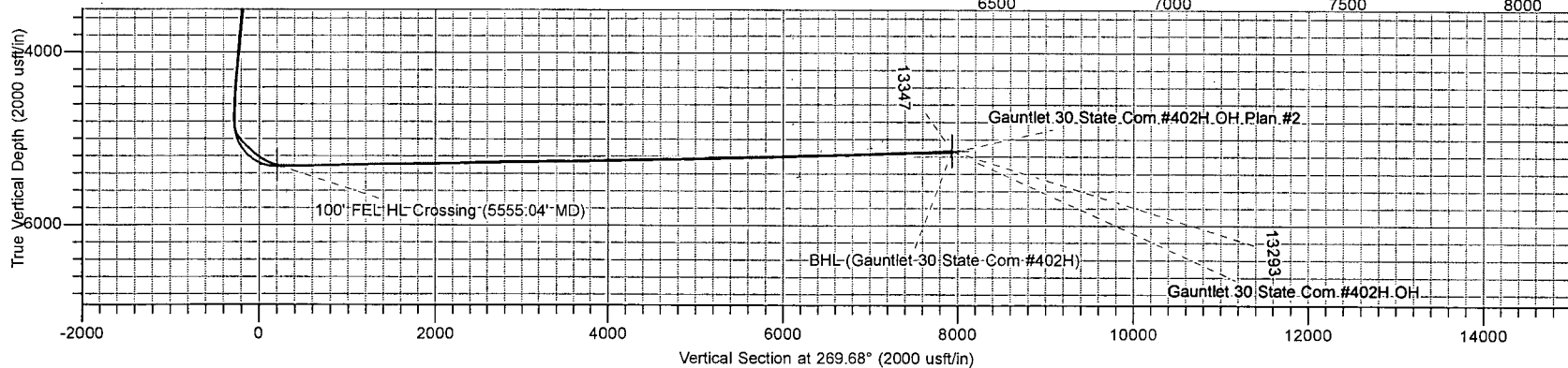
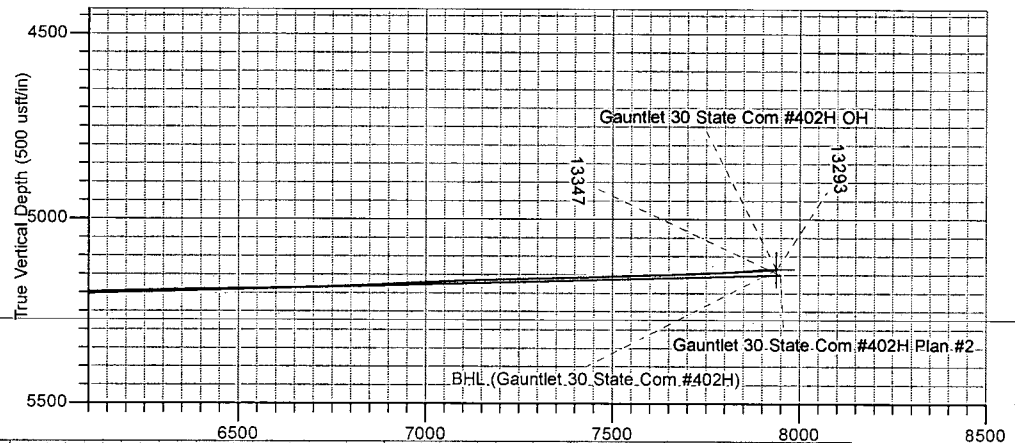
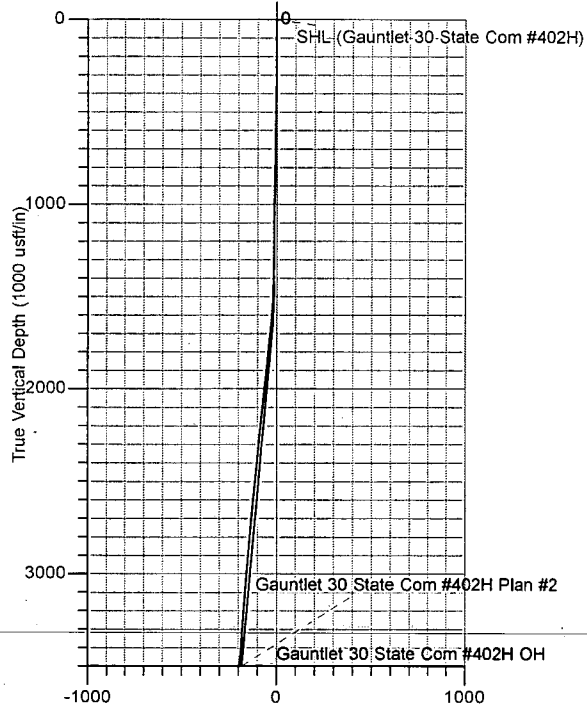
Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
100' FEL HL Crossing	5306.79	-13.52	-207.86	32.725119	-104.494821
BHL	5136.20	-44.00	-7938.68	32.725000	-104.519960
SHL	0.00	0.00	0.00	32.725157	-104.494145

Actual Line Calls
 SHL: 630' FNL, 1449' FWL Sec 28
 BHL: 649' FNL, 1212' FEL Sec 30



Vertical Section at 269.68° (2000 usft/in)



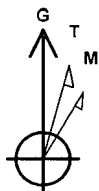
TOTAL DIRECTIONAL SERVICES LLC
 671 Academy Ct, Windsor, CO 80550
 Phone: (970) 460-9402

Design: OH (Gauntlet 30 State Com #402H/OH)
 Created By: Micah Ault
 Date: 15:31, January 03 2020
 Approved: _____ Date: _____

EOG Resources

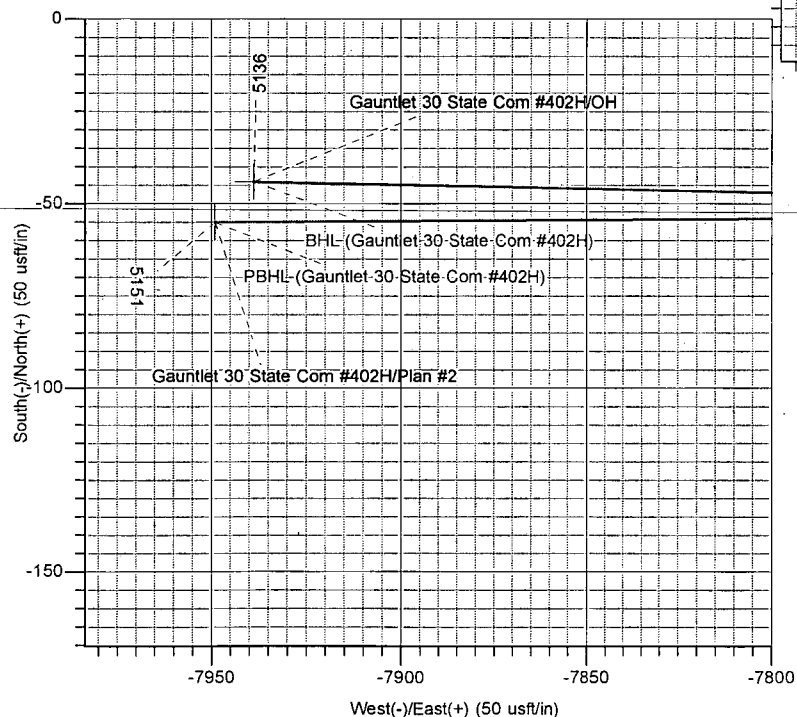
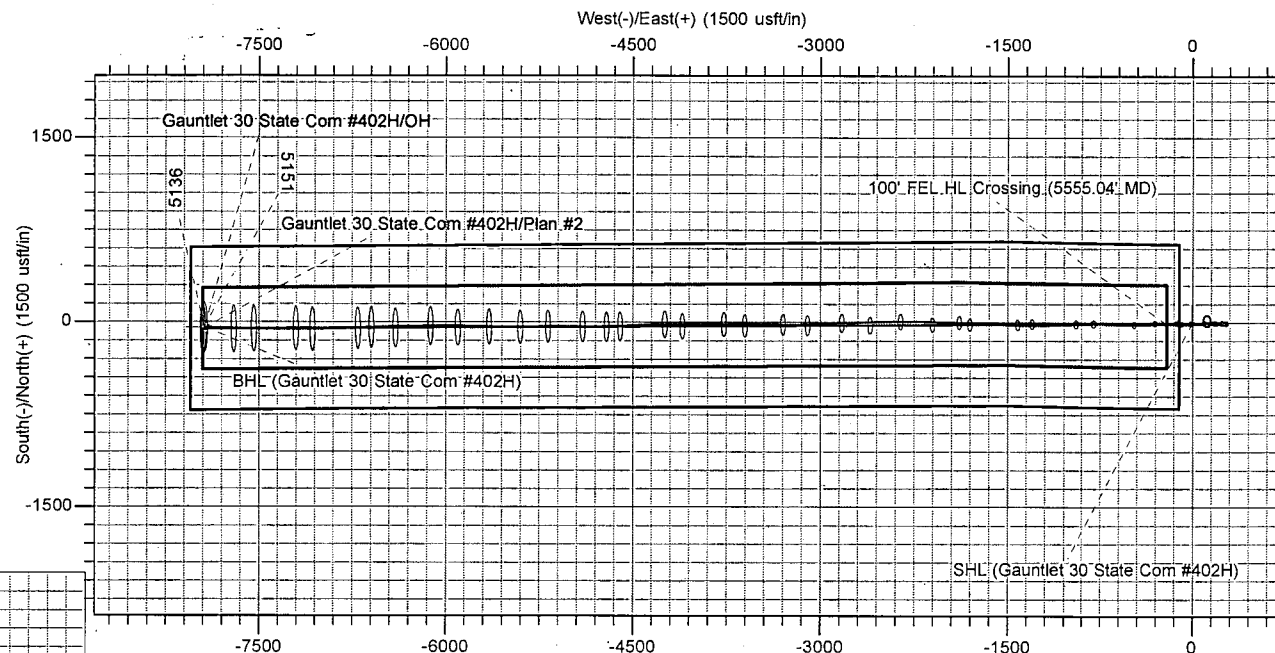
Project: Eddy County, NM (NAD 83 - Grid)
 Site: Gauntlet 30 State Com
 Well: Gauntlet 30 State Com #402H
 Wellbore: OH
 Design: OH

PROJECT DETAILS: Eddy County, NM (NAD 83 - Grid)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone



Azimuths to Grid North
 True North: 0.09°
 Magnetic North: 7.24°

Magnetic Field
 Strength: 47880.5nT
 Dip Angle: 60.34°
 Date: 12/3/2019
 Model: IGRF2015



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	Easting	Latitude	Longitude
100' FEL HL Crossing	5306.79	-13.52	-207.86	627567.48	491676.14	32.725119	-104.494821
BHL	5136.20	-44.00	-7938.68	627537.00	483945.32	32.725000	-104.519960
SHL	0.00	0.00	0.00	627581.00	491884.00	32.725157	-104.494145

Actual Line Calls
 SHL: 630' FNL, 1449' FWL Sec 28
 BHL: 649' FNL, 1212' FEL Sec 30



TOTAL DIRECTIONAL SERVICES LLC
 671 Academy Ct, Windsor, CO 80550
 Phone: (970) 460-9402

Design: OH (Gauntlet 30 State Com #402H/OH)
 Created By: Micah Ault
 Date: 15:32, January 03 2020
 Approved: _____ Date: _____