

Devon Energy

Project: Lea County, NM (NAD-83)

Site: Gaucho 21 Fed

Well: 7H

Wellbore: OH

Design: Plan #1

3428.1' GE + 24' KB @ 3452.10usft

Ground Level: 3428.10



Azimuths to Grid North

True North: -0.46°

Magnetic North: 6.32°

Magnetic Field

Strength: 48148.6snT

Dip Angle: 60.22°

Date: 3/16/2018

Model: HDGM

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

Geodetic System: US State Plane 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone



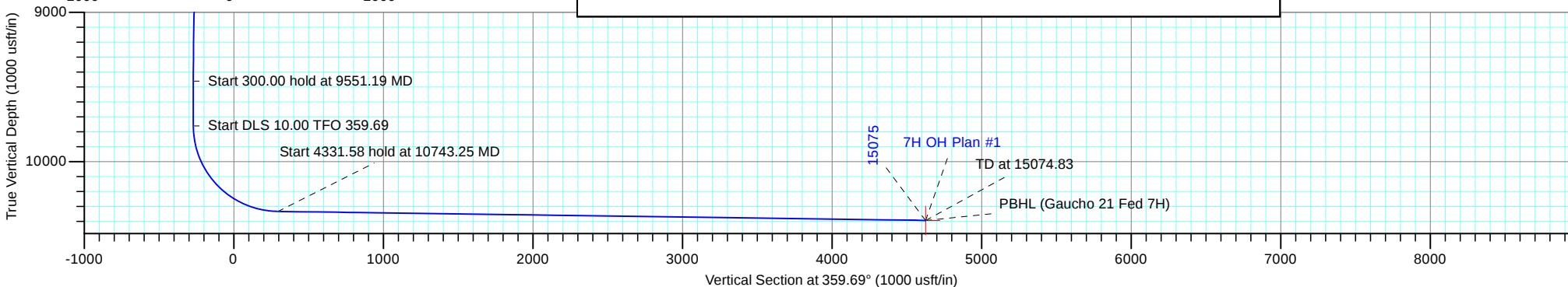
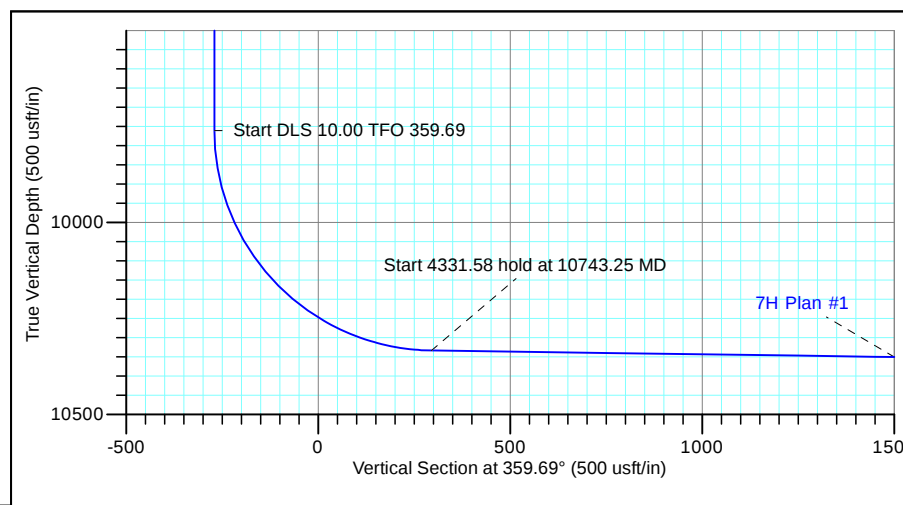
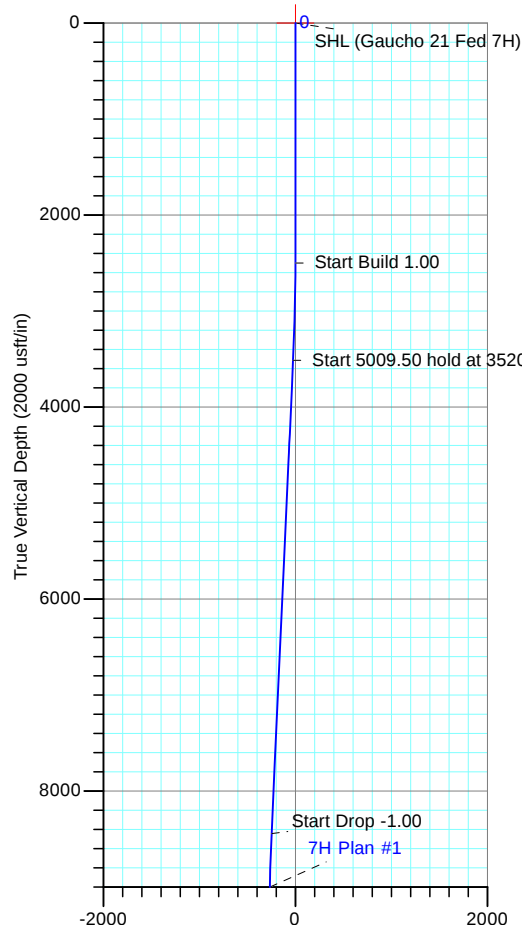
SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	
3520.84	10.21	255.04	3515.45	-23.41	-87.63	1.00	255.04	-22.94	
8530.34	10.21	255.04	8445.65	-252.59	-945.37	0.00	0.00	-247.47	
9551.19	0.00	0.00	9461.10	-276.00	-1033.00	1.00	180.00	-270.41	
9851.19	0.00	0.00	9761.10	-276.00	-1033.00	0.00	0.00	-270.41	
10743.25	89.21	359.69	10334.00	289.01	-1036.09	10.00	359.69	294.61	
15074.83	89.21	359.69	10394.00	4620.11	-1059.78	0.00	0.00	4625.78	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PBHL (Gaucho 21 Fed 7H)	10394.00	4620.11	-1059.78	32° 23' 0.7717 N	103° 28' 17.5055 W
SHL (Gaucho 21 Fed 7H)	0.00	0.00	0.00	32° 22' 14.9725 N	103° 28' 5.5833 W

OCD - HOBBS
09/27/2018
RECEIVED



LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax: 936/756-7595

Plan: Plan #1 (7H/OH)
Gaucho 21 Fed
Created By: Dustin Ault
Date: 11:03, March 16 2018
Approved: _____
Date: _____

Devon Energy

Project: Lea County, NM (NAD-83)
Site: Gaucho 21 Fed
Well: 7H
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.46°
Magnetic North: 6.32°

Magnetic Field
Strength: 48148.6snT
Dip Angle: 60.22°
Date: 3/16/2018
Model: HDGM



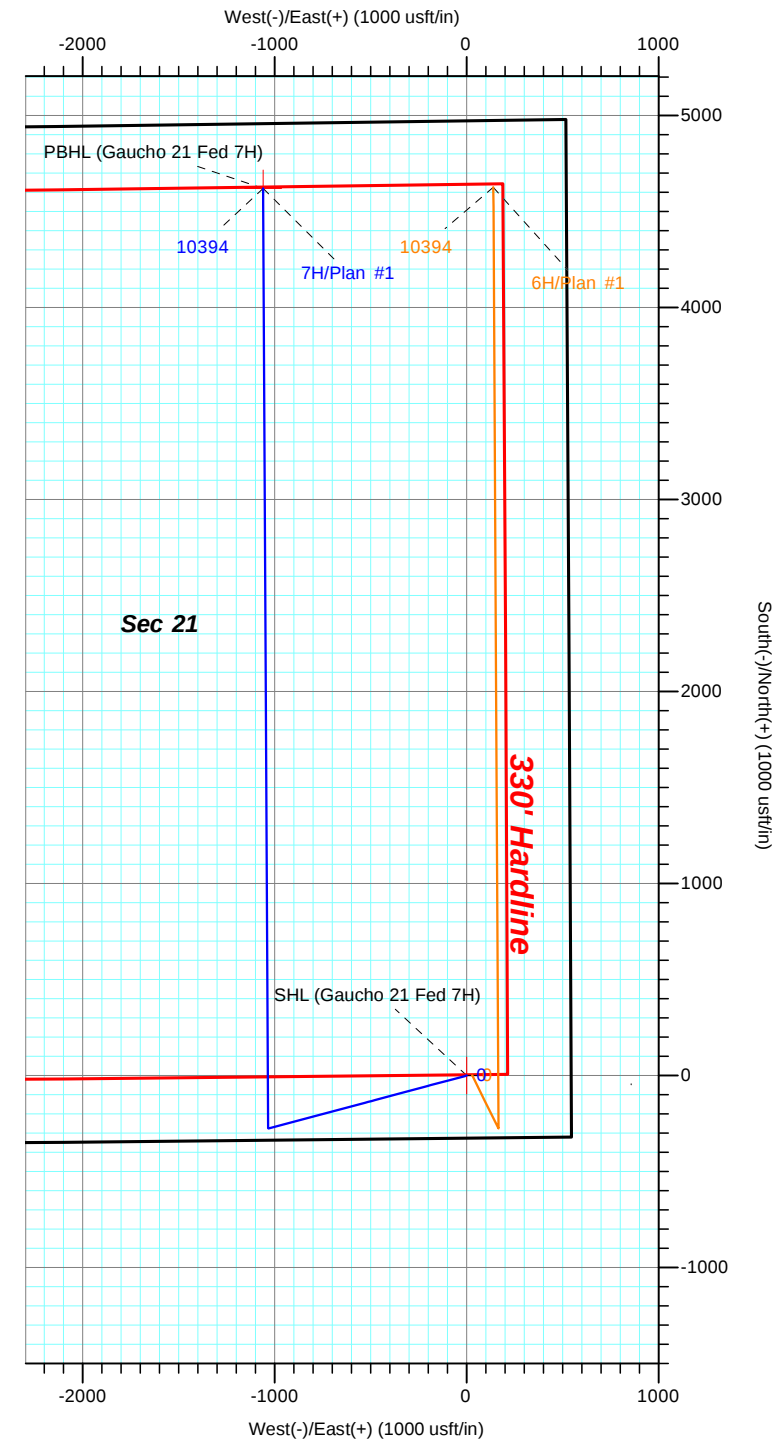
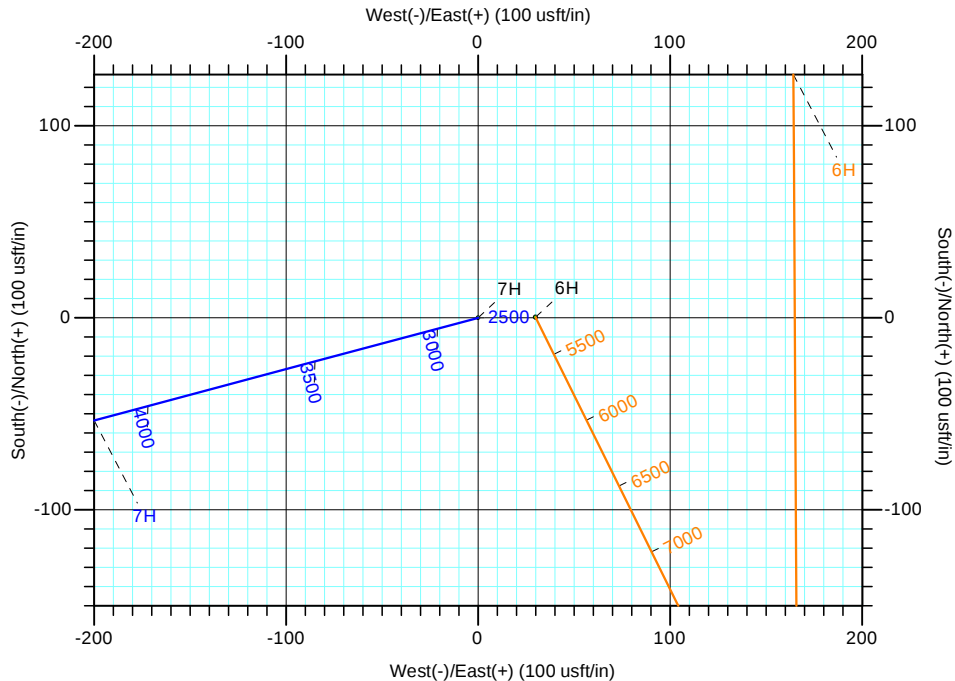
PROJECT DETAILS: Lea County, NM (NAD-83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	
3520.84	10.21	255.04	3515.45	-23.41	-87.63	1.00	255.04	-3.23	
8530.34	10.21	255.04	8445.65	-252.59	-945.37	0.00	0.00	-34.83	
9551.19	0.00	0.00	9461.10	-276.00	-1033.00	1.00	180.00	-38.06	
9851.19	0.00	0.00	9761.10	-276.00	-1033.00	0.00	0.00	-38.06	
10743.25	89.21	359.69	10334.00	289.01	-1036.09	10.00	359.69	513.34	
15074.83	89.21	359.69	10394.00	4620.11	-1059.78	0.00	0.00	4740.10	PBHL (Gaucho 21 Fed 7H)

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL (Gaucho 21 Fed 7H)	10394.00	4620.11	-1059.78	504337.79	807372.70	32° 23' 0.7717 N	103° 28' 17.5055 W
SHL (Gaucho 21 Fed 7H)	0.00	0.00	0.00	499717.68	808432.48	32° 22' 14.9725 N	103° 28' 5.5833 W



LEAM DRILLING SYSTEMS LLC
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7577, Fax: 936/756-7595

Plan: Plan #1 (7H/OH)
Gaucho 21 Fed
Created By: Dustin Ault
Date: 10:58, March 16 2018
Approved: _____
Date: _____

Devon Energy

Lea County, NM (NAD-83)

Gaucha 21 Fed

7H

OH

Plan: Plan #1

Standard Planning Report

16 March, 2018

LEAM Drilling Services

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well 7H
Company:	Devon Energy	TVD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Site:	Gaucha 21 Fed	North Reference:	Grid
Well:	7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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

Site		Gaucha 21 Fed			
Site Position:		Northing:	499,563.64 usft	Latitude:	32° 22' 13.7105 N
From:	Map	Easting:	805,134.27 usft	Longitude:	103° 28' 44.0521 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.46 °

Well	7H					
Well Position	+N/-S	154.04 usft	Northing:	499,717.68 usft	Latitude:	32° 22' 14.9725 N
	+E/-W	3,298.21 usft	Easting:	808,432.48 usft	Longitude:	103° 28' 5.5833 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,428.10 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/16/2018	6.78	60.22	48,149

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.69

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,520.84	10.21	255.04	3,515.45	-23.41	-87.63	1.00	1.00	0.00	255.04	
8,530.34	10.21	255.04	8,445.65	-252.59	-945.37	0.00	0.00	0.00	0.00	
9,551.19	0.00	0.00	9,461.10	-276.00	-1,033.00	1.00	-1.00	0.00	180.00	
9,851.19	0.00	0.00	9,761.10	-276.00	-1,033.00	0.00	0.00	0.00	0.00	
10,743.25	89.21	359.69	10,334.00	289.01	-1,036.09	10.00	10.00	-0.04	359.69	
15,074.83	89.21	359.69	10,394.00	4,620.11	-1,059.78	0.00	0.00	0.00	0.00	PBHL (Gaucha 21 Fe

LEAM Drilling Services

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well 7H
Company:	Devon Energy	TVD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Site:	Gaucha 21 Fed	North Reference:	Grid
Well:	7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SHL (Gaucha 21 Fed 7H)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	1.00	255.04	2,599.99	-0.23	-0.84	-0.22	1.00	1.00	0.00
2,700.00	2.00	255.04	2,699.96	-0.90	-3.37	-0.88	1.00	1.00	0.00
2,800.00	3.00	255.04	2,799.86	-2.03	-7.59	-1.99	1.00	1.00	0.00
2,900.00	4.00	255.04	2,899.68	-3.60	-13.48	-3.53	1.00	1.00	0.00
3,000.00	5.00	255.04	2,999.37	-5.63	-21.06	-5.51	1.00	1.00	0.00
3,100.00	6.00	255.04	3,098.90	-8.10	-30.32	-7.94	1.00	1.00	0.00
3,200.00	7.00	255.04	3,198.26	-11.02	-41.26	-10.80	1.00	1.00	0.00
3,300.00	8.00	255.04	3,297.40	-14.39	-53.87	-14.10	1.00	1.00	0.00
3,400.00	9.00	255.04	3,396.30	-18.21	-68.15	-17.84	1.00	1.00	0.00
3,500.00	10.00	255.04	3,494.93	-22.47	-84.10	-22.01	1.00	1.00	0.00
3,520.84	10.21	255.04	3,515.45	-23.41	-87.63	-22.94	1.00	1.00	0.00
3,600.00	10.21	255.04	3,593.35	-27.03	-101.18	-26.49	0.00	0.00	0.00
3,700.00	10.21	255.04	3,691.77	-31.61	-118.30	-30.97	0.00	0.00	0.00
3,800.00	10.21	255.04	3,790.19	-36.18	-135.43	-35.45	0.00	0.00	0.00
3,900.00	10.21	255.04	3,888.61	-40.76	-152.55	-39.93	0.00	0.00	0.00
4,000.00	10.21	255.04	3,987.02	-45.33	-169.67	-44.41	0.00	0.00	0.00
4,100.00	10.21	255.04	4,085.44	-49.91	-186.79	-48.90	0.00	0.00	0.00
4,200.00	10.21	255.04	4,183.86	-54.48	-203.92	-53.38	0.00	0.00	0.00
4,300.00	10.21	255.04	4,282.27	-59.06	-221.04	-57.86	0.00	0.00	0.00
4,400.00	10.21	255.04	4,380.69	-63.63	-238.16	-62.34	0.00	0.00	0.00
4,500.00	10.21	255.04	4,479.11	-68.21	-255.28	-66.82	0.00	0.00	0.00
4,600.00	10.21	255.04	4,577.52	-72.78	-272.40	-71.31	0.00	0.00	0.00
4,700.00	10.21	255.04	4,675.94	-77.36	-289.53	-75.79	0.00	0.00	0.00
4,800.00	10.21	255.04	4,774.36	-81.93	-306.65	-80.27	0.00	0.00	0.00
4,900.00	10.21	255.04	4,872.77	-86.51	-323.77	-84.75	0.00	0.00	0.00
5,000.00	10.21	255.04	4,971.19	-91.08	-340.89	-89.24	0.00	0.00	0.00
5,100.00	10.21	255.04	5,069.61	-95.66	-358.02	-93.72	0.00	0.00	0.00

LEAM Drilling Services

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well 7H
Company:	Devon Energy	TVD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Site:	Gaucha 21 Fed	North Reference:	Grid
Well:	7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)	
5,200.00	10.21	255.04	5,168.03	-100.23	-375.14	-98.20	0.00	0.00	0.00	
5,300.00	10.21	255.04	5,266.44	-104.81	-392.26	-102.68	0.00	0.00	0.00	
5,400.00	10.21	255.04	5,364.86	-109.38	-409.38	-107.16	0.00	0.00	0.00	
5,500.00	10.21	255.04	5,463.28	-113.96	-426.51	-111.65	0.00	0.00	0.00	
5,600.00	10.21	255.04	5,561.69	-118.53	-443.63	-116.13	0.00	0.00	0.00	
5,700.00	10.21	255.04	5,660.11	-123.10	-460.75	-120.61	0.00	0.00	0.00	
5,800.00	10.21	255.04	5,758.53	-127.68	-477.87	-125.09	0.00	0.00	0.00	
5,900.00	10.21	255.04	5,856.94	-132.25	-495.00	-129.57	0.00	0.00	0.00	
6,000.00	10.21	255.04	5,955.36	-136.83	-512.12	-134.06	0.00	0.00	0.00	
6,100.00	10.21	255.04	6,053.78	-141.40	-529.24	-138.54	0.00	0.00	0.00	
6,200.00	10.21	255.04	6,152.20	-145.98	-546.36	-143.02	0.00	0.00	0.00	
6,300.00	10.21	255.04	6,250.61	-150.55	-563.48	-147.50	0.00	0.00	0.00	
6,400.00	10.21	255.04	6,349.03	-155.13	-580.61	-151.98	0.00	0.00	0.00	
6,500.00	10.21	255.04	6,447.45	-159.70	-597.73	-156.47	0.00	0.00	0.00	
6,600.00	10.21	255.04	6,545.86	-164.28	-614.85	-160.95	0.00	0.00	0.00	
6,700.00	10.21	255.04	6,644.28	-168.85	-631.97	-165.43	0.00	0.00	0.00	
6,800.00	10.21	255.04	6,742.70	-173.43	-649.10	-169.91	0.00	0.00	0.00	
6,900.00	10.21	255.04	6,841.11	-178.00	-666.22	-174.40	0.00	0.00	0.00	
7,000.00	10.21	255.04	6,939.53	-182.58	-683.34	-178.88	0.00	0.00	0.00	
7,100.00	10.21	255.04	7,037.95	-187.15	-700.46	-183.36	0.00	0.00	0.00	
7,200.00	10.21	255.04	7,136.36	-191.73	-717.59	-187.84	0.00	0.00	0.00	
7,300.00	10.21	255.04	7,234.78	-196.30	-734.71	-192.32	0.00	0.00	0.00	
7,400.00	10.21	255.04	7,333.20	-200.88	-751.83	-196.81	0.00	0.00	0.00	
7,500.00	10.21	255.04	7,431.62	-205.45	-768.95	-201.29	0.00	0.00	0.00	
7,600.00	10.21	255.04	7,530.03	-210.03	-786.08	-205.77	0.00	0.00	0.00	
7,700.00	10.21	255.04	7,628.45	-214.60	-803.20	-210.25	0.00	0.00	0.00	
7,800.00	10.21	255.04	7,726.87	-219.18	-820.32	-214.73	0.00	0.00	0.00	
7,900.00	10.21	255.04	7,825.28	-223.75	-837.44	-219.22	0.00	0.00	0.00	
8,000.00	10.21	255.04	7,923.70	-228.33	-854.56	-223.70	0.00	0.00	0.00	
8,100.00	10.21	255.04	8,022.12	-232.90	-871.69	-228.18	0.00	0.00	0.00	
8,200.00	10.21	255.04	8,120.53	-237.47	-888.81	-232.66	0.00	0.00	0.00	
8,300.00	10.21	255.04	8,218.95	-242.05	-905.93	-237.14	0.00	0.00	0.00	
8,400.00	10.21	255.04	8,317.37	-246.62	-923.05	-241.63	0.00	0.00	0.00	
8,500.00	10.21	255.04	8,415.79	-251.20	-940.18	-246.11	0.00	0.00	0.00	
8,530.34	10.21	255.04	8,445.65	-252.59	-945.37	-247.47	0.00	0.00	0.00	
8,600.00	9.51	255.04	8,514.28	-255.67	-956.90	-250.49	1.00	-1.00	0.00	
8,700.00	8.51	255.04	8,613.04	-259.71	-972.03	-254.45	1.00	-1.00	0.00	
8,800.00	7.51	255.04	8,712.06	-263.31	-985.49	-257.97	1.00	-1.00	0.00	
8,900.00	6.51	255.04	8,811.31	-266.46	-997.29	-261.06	1.00	-1.00	0.00	
9,000.00	5.51	255.04	8,910.76	-269.16	-1,007.41	-263.71	1.00	-1.00	0.00	
9,100.00	4.51	255.04	9,010.38	-271.42	-1,015.85	-265.92	1.00	-1.00	0.00	
9,200.00	3.51	255.04	9,110.13	-273.22	-1,022.61	-267.69	1.00	-1.00	0.00	
9,300.00	2.51	255.04	9,209.99	-274.58	-1,027.68	-269.01	1.00	-1.00	0.00	
9,400.00	1.51	255.04	9,309.93	-275.49	-1,031.07	-269.90	1.00	-1.00	0.00	
9,500.00	0.51	255.04	9,409.91	-275.94	-1,032.78	-270.35	1.00	-1.00	0.00	
9,551.19	0.00	0.00	9,461.10	-276.00	-1,033.00	-270.41	1.00	-1.00	0.00	
9,600.00	0.00	0.00	9,509.91	-276.00	-1,033.00	-270.41	0.00	0.00	0.00	
9,700.00	0.00	0.00	9,609.91	-276.00	-1,033.00	-270.41	0.00	0.00	0.00	
9,800.00	0.00	0.00	9,709.91	-276.00	-1,033.00	-270.41	0.00	0.00	0.00	
9,851.19	0.00	0.00	9,761.10	-276.00	-1,033.00	-270.41	0.00	0.00	0.00	
9,900.00	4.88	359.69	9,809.85	-273.92	-1,033.01	-268.33	10.00	10.00	0.00	
9,950.00	9.88	359.69	9,859.42	-267.50	-1,033.05	-261.91	10.00	10.00	0.00	
10,000.00	14.88	359.69	9,908.24	-256.78	-1,033.11	-251.19	10.00	10.00	0.00	
10,050.00	19.88	359.69	9,955.95	-241.85	-1,033.19	-236.26	10.00	10.00	0.00	

LEAM Drilling Services

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well 7H
Company:	Devon Energy	TVD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Site:	Gaucha 21 Fed	North Reference:	Grid
Well:	7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)	
10,100.00	24.88	359.69	10,002.17	-222.82	-1,033.29	-217.23	10.00	10.00	0.00	
10,150.00	29.88	359.69	10,046.55	-199.83	-1,033.42	-194.24	10.00	10.00	0.00	
10,200.00	34.88	359.69	10,088.76	-173.06	-1,033.56	-167.47	10.00	10.00	0.00	
10,250.00	39.88	359.69	10,128.48	-142.72	-1,033.73	-137.12	10.00	10.00	0.00	
10,300.00	44.88	359.69	10,165.40	-109.03	-1,033.91	-103.43	10.00	10.00	0.00	
10,350.00	49.88	359.69	10,199.25	-72.24	-1,034.11	-66.65	10.00	10.00	0.00	
10,400.00	54.88	359.69	10,229.76	-32.65	-1,034.33	-27.06	10.00	10.00	0.00	
10,450.00	59.88	359.69	10,256.70	9.45	-1,034.56	15.04	10.00	10.00	0.00	
10,500.00	64.88	359.69	10,279.87	53.73	-1,034.80	59.33	10.00	10.00	0.00	
10,550.00	69.88	359.69	10,299.10	99.87	-1,035.06	105.47	10.00	10.00	0.00	
10,600.00	74.88	359.69	10,314.23	147.51	-1,035.32	153.11	10.00	10.00	0.00	
10,650.00	79.88	359.69	10,325.15	196.29	-1,035.58	201.89	10.00	10.00	0.00	
10,700.00	84.88	359.69	10,331.77	245.83	-1,035.85	251.43	10.00	10.00	0.00	
10,743.25	89.21	359.69	10,334.00	289.01	-1,036.09	294.61	10.00	10.00	0.00	
10,800.00	89.21	359.69	10,334.79	345.76	-1,036.40	351.36	0.00	0.00	0.00	
10,900.00	89.21	359.69	10,336.17	445.74	-1,036.95	451.35	0.00	0.00	0.00	
11,000.00	89.21	359.69	10,337.56	545.73	-1,037.49	551.34	0.00	0.00	0.00	
11,100.00	89.21	359.69	10,338.94	645.72	-1,038.04	651.33	0.00	0.00	0.00	
11,200.00	89.21	359.69	10,340.33	745.71	-1,038.59	751.32	0.00	0.00	0.00	
11,300.00	89.21	359.69	10,341.71	845.70	-1,039.14	851.31	0.00	0.00	0.00	
11,400.00	89.21	359.69	10,343.10	945.69	-1,039.68	951.30	0.00	0.00	0.00	
11,500.00	89.21	359.69	10,344.48	1,045.68	-1,040.23	1,051.29	0.00	0.00	0.00	
11,600.00	89.21	359.69	10,345.87	1,145.67	-1,040.78	1,151.28	0.00	0.00	0.00	
11,700.00	89.21	359.69	10,347.26	1,245.66	-1,041.32	1,251.27	0.00	0.00	0.00	
11,800.00	89.21	359.69	10,348.64	1,345.64	-1,041.87	1,351.26	0.00	0.00	0.00	
11,900.00	89.21	359.69	10,350.03	1,445.63	-1,042.42	1,451.25	0.00	0.00	0.00	
12,000.00	89.21	359.69	10,351.41	1,545.62	-1,042.96	1,551.24	0.00	0.00	0.00	
12,100.00	89.21	359.69	10,352.80	1,645.61	-1,043.51	1,651.23	0.00	0.00	0.00	
12,200.00	89.21	359.69	10,354.18	1,745.60	-1,044.06	1,751.22	0.00	0.00	0.00	
12,300.00	89.21	359.69	10,355.57	1,845.59	-1,044.60	1,851.21	0.00	0.00	0.00	
12,400.00	89.21	359.69	10,356.95	1,945.58	-1,045.15	1,951.20	0.00	0.00	0.00	
12,500.00	89.21	359.69	10,358.34	2,045.57	-1,045.70	2,051.19	0.00	0.00	0.00	
12,600.00	89.21	359.69	10,359.72	2,145.56	-1,046.25	2,151.19	0.00	0.00	0.00	
12,700.00	89.21	359.69	10,361.11	2,245.54	-1,046.79	2,251.18	0.00	0.00	0.00	
12,800.00	89.21	359.69	10,362.49	2,345.53	-1,047.34	2,351.17	0.00	0.00	0.00	
12,900.00	89.21	359.69	10,363.88	2,445.52	-1,047.89	2,451.16	0.00	0.00	0.00	
13,000.00	89.21	359.69	10,365.26	2,545.51	-1,048.43	2,551.15	0.00	0.00	0.00	
13,100.00	89.21	359.69	10,366.65	2,645.50	-1,048.98	2,651.14	0.00	0.00	0.00	
13,200.00	89.21	359.69	10,368.03	2,745.49	-1,049.53	2,751.13	0.00	0.00	0.00	
13,300.00	89.21	359.69	10,369.42	2,845.48	-1,050.07	2,851.12	0.00	0.00	0.00	
13,400.00	89.21	359.69	10,370.80	2,945.47	-1,050.62	2,951.11	0.00	0.00	0.00	
13,500.00	89.21	359.69	10,372.19	3,045.46	-1,051.17	3,051.10	0.00	0.00	0.00	
13,600.00	89.21	359.69	10,373.57	3,145.45	-1,051.71	3,151.09	0.00	0.00	0.00	
13,700.00	89.21	359.69	10,374.96	3,245.43	-1,052.26	3,251.08	0.00	0.00	0.00	
13,800.00	89.21	359.69	10,376.34	3,345.42	-1,052.81	3,351.07	0.00	0.00	0.00	
13,900.00	89.21	359.69	10,377.73	3,445.41	-1,053.35	3,451.06	0.00	0.00	0.00	
14,000.00	89.21	359.69	10,379.11	3,545.40	-1,053.90	3,551.05	0.00	0.00	0.00	
14,100.00	89.21	359.69	10,380.50	3,645.39	-1,054.45	3,651.04	0.00	0.00	0.00	
14,200.00	89.21	359.69	10,381.88	3,745.38	-1,055.00	3,751.03	0.00	0.00	0.00	
14,300.00	89.21	359.69	10,383.27	3,845.37	-1,055.54	3,851.02	0.00	0.00	0.00	
14,400.00	89.21	359.69	10,384.65	3,945.36	-1,056.09	3,951.01	0.00	0.00	0.00	
14,500.00	89.21	359.69	10,386.04	4,045.35	-1,056.64	4,051.00	0.00	0.00	0.00	
14,600.00	89.21	359.69	10,387.42	4,145.33	-1,057.18	4,150.99	0.00	0.00	0.00	
14,700.00	89.21	359.69	10,388.81	4,245.32	-1,057.73	4,250.98	0.00	0.00	0.00	

LEAM Drilling Services

Planning Report

Database:	EDM 5000.1 Multi User Db	Local Co-ordinate Reference:	Well 7H
Company:	Devon Energy	TVD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Project:	Lea County, NM (NAD-83)	MD Reference:	3428.1' GE + 24' KB @ 3452.10usft
Site:	Gaucha 21 Fed	North Reference:	Grid
Well:	7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #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)
14,800.00	89.21	359.69	10,390.19	4,345.31	-1,058.28	4,350.97	0.00	0.00	0.00
14,900.00	89.21	359.69	10,391.58	4,445.30	-1,058.82	4,450.96	0.00	0.00	0.00
15,000.00	89.21	359.69	10,392.96	4,545.29	-1,059.37	4,550.96	0.00	0.00	0.00
15,074.83	89.21	359.69	10,394.00	4,620.11	-1,059.78	4,625.78	0.00	0.00	0.00
PBHL (Gaucha 21 Fed 7H)									

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 (Gaucha 21 Fed 7H- - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	499,717.68	808,432.48	32° 22' 14.9725 N	103° 28' 5.5833 W
PBHL (Gaucha 21 Fed 7 - plan hits target center - Point	0.00	0.00	10,394.00	4,620.11	-1,059.78	504,337.79	807,372.70	32° 23' 0.7717 N	103° 28' 17.5055 W