

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING CALLED
BY THE OIL CONSERVATION DIVISION FOR
THE PURPOSE OF CONSIDERING:**

**APPLICATION OF MEWBOURNE OIL COMPANY
FOR A NON-STANDARD OIL SPACING AND
PRORATION UNIT AND COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO.**

Case No. 15,340

VERIFIED STATEMENT OF NATHAN CLESS

COUNTY OF MIDLAND)
) ss.
STATE OF TEXAS)

Nathan Cless, being duly sworn upon his oath, deposes and states:

1. I am over the age of 18, and have personal knowledge of the matters stated herein.
2. I am a geologist for Mewbourne Oil Company ("Mewbourne"), and I am familiar with the geological matters involved in this case
3. I have been previously qualified as an expert petroleum geologist by the Division.
4. The geological plats attached hereto show the following:
 - (a) Attachment A is a structure map on the base of the 2nd Bone Spring sand, as well as a net isopach map of the 2nd Bone Spring lower sand. It shows a consistent net thickness of the 2nd Bone Spring lower sand across the proposed proration unit. It also shows other Bone Spring horizontal producers in the immediate area, as well as the location of cross section A-A', explained in Attachment B. The proposed horizontal well is highlighted with a red arrow.
 - (b) Attachment B is a north-south cross section A-A'. The horizontal target is the lower 2nd Bone Spring sand, and it is noted on the cross section. The 2nd Bone Spring sand has a uniform thickness across the well unit with porosity in the 12-14% range.
5. I conclude from the maps that the project area is justified from a geologic standpoint.

Oil Conservation Division
Case No. _____
Exhibit No. 2

6. There is no faulting or other geologic impediment which would adversely affect the drilling of the subject well.

7. The beginning and terminus of the producing interval of the well will be at an orthodox location.

8. Attachment C contains production information from other Bone Spring horizontal wells drilled in this area. It shows that both standup and laydown wells have been drilled in the area with good results from both. Mewbourne has already established standup locations in section 28.

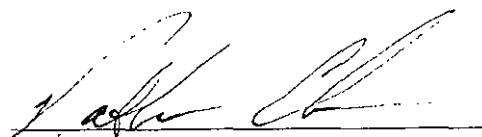
9. Attachment D is the proposed horizontal well plan. The well will have approximately twenty completion stages using approximately 1,500,000 gal fluid and 2,200,000 pounds of sand. The beginning of the producing interval will be approximately 650 from the south line and 1800 feet from the east line of Section 28.


Nathan Cless

VERIFICATION

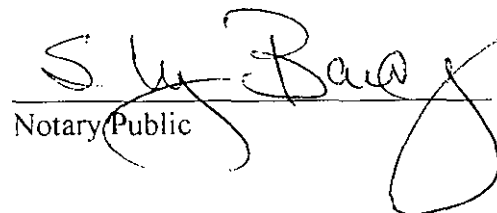
STATE OF TEXAS)
) ss.
COUNTY OF MIDLAND)

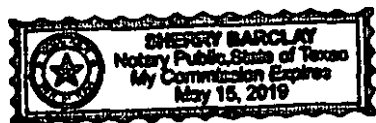
Nathan Cless, being duly sworn upon his oath, deposes and states that: He is a geologist for Mewbourne Oil Company; he is authorized to make this verification on its behalf; he has read the foregoing statement, and knows the contents thereof; and the same is true and correct to the best of his knowledge, information, and belief.

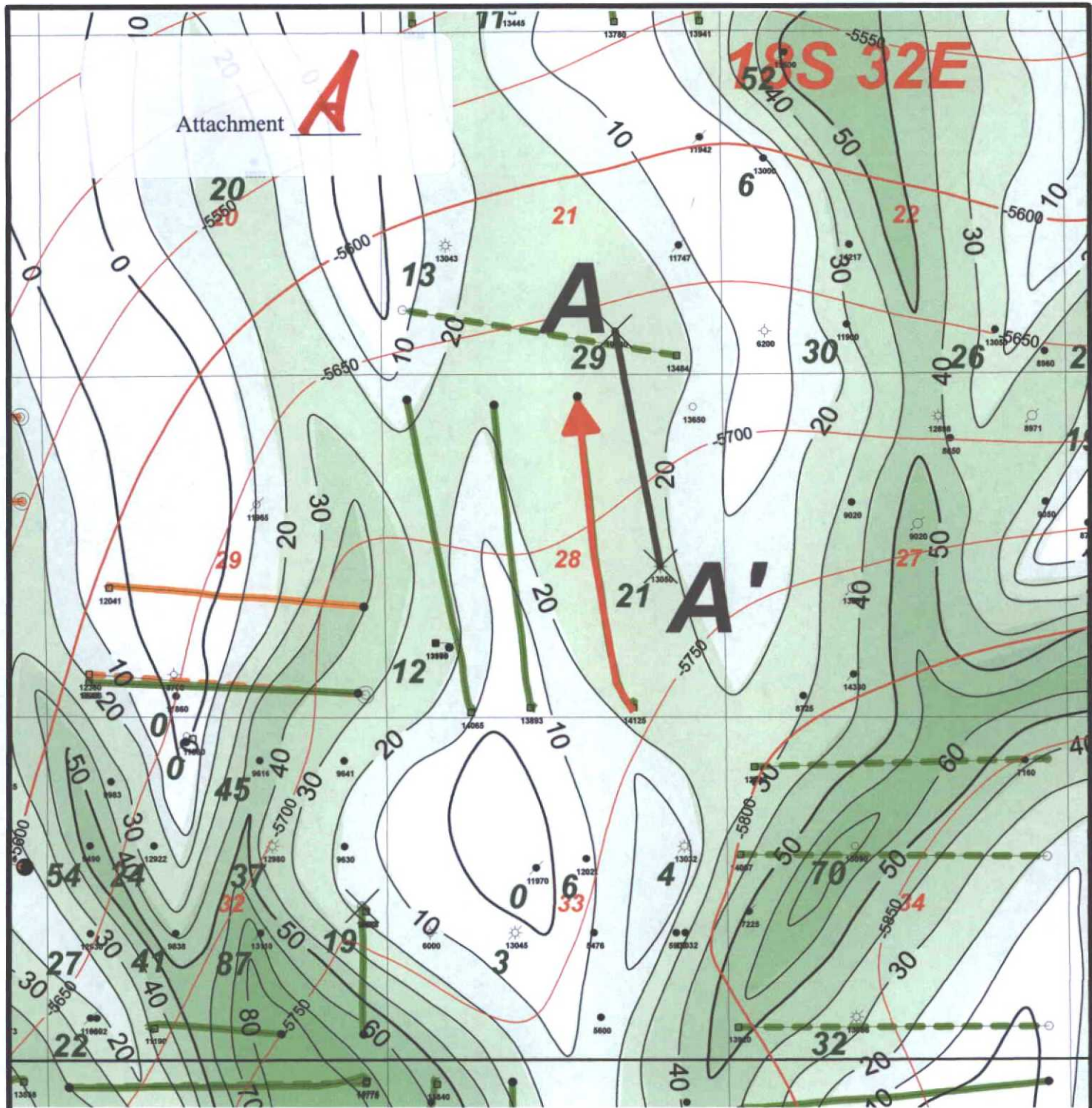

Nathan Cless

SUBSCRIBED AND SWORN TO before me this 16 day of June, 2015 by Nathan Cless.

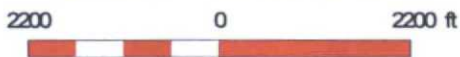
My Commission Expires: 5/16/2019


Notary Public

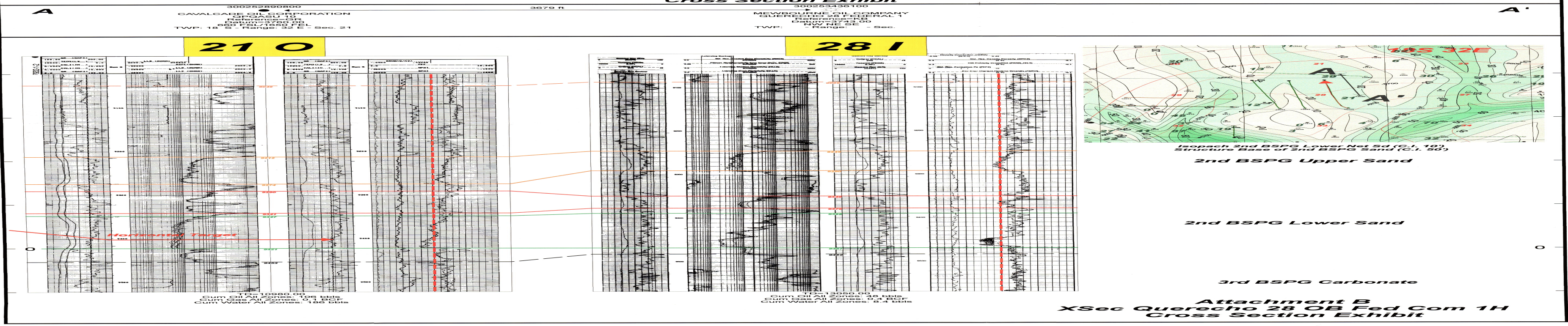




1 inch = 2200 feet



MOC Mewbourne Oil Company		
Attachment A Querecho 28 OB Fed Com 1H Net Isopach 2nd BSPG Lower Sd (C.I. 10') Structure Base of 2nd BSPG Sand (C.I. 50')		
6/15/2013	Las County	New Mexico
Wells <5000' Filtered Out	1 Inch = 2200 Feet	N.Clean



Attachment C - Querecho 28 OB Fed Com 1H Horizontal Bone Spring Production Data Table

Well Name	Operator	API	Location	BSPG Completion Date	Cum Oil (mbo)	Cum Gas (bcf)	Cum Water (mbw)	BSPG Zone	Orientation
Querecho 28 NC Fed 1H	Mewbourne Oil	3002541238	28NC/18S/32E	11/1/2013	88.0	0.2	39.0	2nd BSPG Sd	NS
Querecho 28 MD Fed 1H	Mewbourne Oil	3002540731	28NMD/18S/32E	11/1/2012	92.0	0.2	47.0	2nd BSPG Sd	NS
Cross Bones 1 29 2H	Chevron	3002540711	29KV/18S/32E	2/1/2013	50.0	0.1	89.0	1st BSPG Sd	EW
Cross Bones 12 29 1H	Chevron	3002540706	29MP/18S/32E	1/1/2013	56.0	0.1	76.0	2nd BSPG Sd	EW
Lear State #1	COG	3002538665	32IP/18S/32E	5/1/2009	39.0	0.1	83.0	2nd BSPG Sd	NS
Lear State #2	COG	3002538665	32NO/18S/32E	10/1/2009	2.0	0.0	3.0	2nd BSPG Sd	EW
Warhawk 3 Fed Com 1H	COG	3002540635	30DA/19S/32E	9/15/2013	101.0	0.1	209.0	2nd BSPG Sd	EW
Patterson B-52 Fed 2H	COG	3002540773	5AD/19S/32E	12/1/2012	70.0	0.1	59.0	2nd BSPG Sd	EW

Mewbourne Oil Co

Lea County, New Mexico

Sec 28-18S-32E

Querecho 28 OB Federal Com #1H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

15 July, 2014

Attachment



DDC
Well Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Querecho 28 OB Federal Com #1H
Company:	Mewbourne Oil Co	TVD Reference:	Well @ 3734.0usft (Patterson #75)
Project:	Lea County, New Mexico	MD Reference:	Well @ 3734.0usft (Patterson #75)
Site:	Sec 28-18S-32E	North Reference:	Grid
Well:	Querecho 28 OB Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Lea County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Sec 28-18S-32E		
Site Position:		Northing:	627,657.52 usft
From:	Map	Easting:	675,165.03 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 43' 27.238 N
		Longitude:	103° 45' 49.524 W
		Grid Convergence:	0.31 °

Well	Querecho 28 OB Federal Com #1H		
Well Position	+N/-S	-4,608.2 usft	Northing:
	+E/-W	-928.9 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
		Latitude:	32° 42' 41.689 N
		Longitude:	103° 46' 0.686 W
		Ground Level:	3,714.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010	7/15/2014	7.33
			Dip Angle
			(°)
			60.53
			Field Strength
			(nT)
			48,577

Design	Design #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			349.13

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	
8,953.0	0.00	0.00	8,953.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,328.0	45.00	316.10	9,290.6	100.8	-97.0	12.00	12.00	0.00	316.10	
9,791.4	91.05	351.29	9,464.0	477.9	-258.6	12.00	9.94	7.59	44.28	
14,141.1	91.05	351.29	9,384.0	4,776.7	-917.3	0.00	0.00	0.00	0.00	PBHL Querecho 28 O

DDC
Well Planning Report



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Project:	Lea County, New Mexico	MD Reference:	Well @ 3734.0usft (Patterson #75)
Site:	Sec 28-18S-32E	North Reference:	Grid
Well:	Querecho 28 OB Federal Com #1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

DDC
Well Planning Report



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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)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
Curve KOP / Build 12°/100'									
8,953.0	0.00	0.00	8,953.0	0.0	0.0	0.0	0.00	0.00	0.00
8,975.0	2.64	316.10	8,975.0	0.4	-0.4	0.4	12.00	12.00	0.00
9,000.0	5.64	316.10	8,999.9	1.7	-1.6	1.9	12.00	12.00	0.00
9,025.0	8.64	316.10	9,024.7	3.9	-3.8	4.5	12.00	12.00	0.00
9,050.0	11.64	316.10	9,049.3	7.1	-6.8	8.2	12.00	12.00	0.00
9,075.0	14.64	316.10	9,073.7	11.2	-10.7	13.0	12.00	12.00	0.00
9,100.0	17.64	316.10	9,097.7	16.2	-15.6	18.8	12.00	12.00	0.00
9,125.0	20.64	316.10	9,121.3	22.1	-21.3	25.7	12.00	12.00	0.00
9,150.0	23.64	316.10	9,144.5	28.9	-27.8	33.6	12.00	12.00	0.00
9,175.0	26.64	316.10	9,167.1	36.5	-35.1	42.5	12.00	12.00	0.00
9,200.0	29.64	316.10	9,189.1	45.0	-43.3	52.4	12.00	12.00	0.00
9,225.0	32.64	316.10	9,210.5	54.3	-52.3	63.2	12.00	12.00	0.00
9,250.0	35.64	316.10	9,231.2	64.4	-62.0	75.0	12.00	12.00	0.00
9,275.0	38.64	316.10	9,251.1	75.3	-72.5	87.6	12.00	12.00	0.00
9,300.0	41.64	316.10	9,270.3	86.9	-83.7	101.1	12.00	12.00	0.00
9,325.0	44.64	316.10	9,288.5	99.2	-95.5	115.5	12.00	12.00	0.00

DDC
Well Planning Report



Database: EDM 5000.1 Single User Db
Company: Mowbourne Oil Co
Project: Lea County, New Mexico
Site: Sec 28-18S-32E
Well: Querecho 28 OB Federal Com #1H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Querecho 28 OB Federal Com #1H
TVD Reference: Well @ 3734.0usft (Patterson #75)
MD Reference: Well @ 3734.0usft (Patterson #75)
North Reference: Grid
Survey Calculation Method: 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)
Build & Turn @ 12°/100'									
9,328.0	45.00	316.10	9,290.6	100.8	-97.0	117.2	12.00	12.00	0.00
9,350.0	46.92	318.62	9,305.9	112.4	-107.7	130.7	12.00	8.72	11.47
9,375.0	49.16	321.30	9,322.6	126.6	-119.6	146.9	12.00	8.97	10.72
9,400.0	51.46	323.81	9,338.6	141.9	-131.3	164.1	12.00	9.20	10.01
9,425.0	53.81	326.15	9,353.8	158.2	-142.7	182.3	12.00	9.40	9.38
9,450.0	56.21	328.36	9,368.1	175.4	-153.8	201.3	12.00	9.58	8.83
9,475.0	58.64	330.45	9,381.6	193.5	-164.5	221.1	12.00	9.72	8.35
9,500.0	61.10	332.43	9,394.1	212.5	-174.8	241.7	12.00	9.85	7.92
9,525.0	63.59	334.31	9,405.7	232.3	-184.8	263.0	12.00	9.96	7.55
9,550.0	66.11	336.12	9,416.3	252.9	-194.2	285.0	12.00	10.06	7.23
9,575.0	68.64	337.86	9,426.0	274.1	-203.2	307.5	12.00	10.14	6.96
9,600.0	71.19	339.54	9,434.5	296.0	-211.8	330.6	12.00	10.21	6.72
9,625.0	73.76	341.17	9,442.1	318.4	-219.8	354.2	12.00	10.27	6.52
9,650.0	76.34	342.76	9,448.5	341.4	-227.3	378.1	12.00	10.31	6.35
9,675.0	78.93	344.31	9,453.9	364.8	-234.2	402.4	12.00	10.35	6.21
9,700.0	81.52	345.84	9,458.1	388.6	-240.5	427.0	12.00	10.39	6.10
9,725.0	84.12	347.34	9,461.2	412.7	-246.3	451.8	12.00	10.41	6.02
9,750.0	86.73	348.83	9,463.2	437.1	-251.4	476.7	12.00	10.42	5.96
9,775.0	89.34	350.31	9,464.1	461.7	-255.9	501.7	12.00	10.43	5.93
End of Curve & Turn @ 9791' MD / 91.05° Inc. / 351.29° Azm. / 9464' TVD									
9,791.4	91.05	351.29	9,464.0	477.9	-258.6	518.1	12.00	10.44	5.92
9,800.0	91.05	351.29	9,463.9	486.4	-259.9	526.7	0.00	0.00	0.00
9,900.0	91.05	351.29	9,462.0	585.2	-275.0	626.6	0.00	0.00	0.00
10,000.0	91.05	351.29	9,460.2	684.0	-290.2	726.5	0.00	0.00	0.00
10,100.0	91.05	351.29	9,458.4	782.9	-305.3	826.4	0.00	0.00	0.00
10,200.0	91.05	351.29	9,456.5	881.7	-320.4	926.3	0.00	0.00	0.00
10,300.0	91.05	351.29	9,454.7	980.5	-335.6	1,026.2	0.00	0.00	0.00
10,400.0	91.05	351.29	9,452.8	1,079.4	-350.7	1,126.1	0.00	0.00	0.00
10,500.0	91.05	351.29	9,451.0	1,178.2	-365.9	1,226.0	0.00	0.00	0.00
10,600.0	91.05	351.29	9,449.2	1,277.0	-381.0	1,326.0	0.00	0.00	0.00
10,700.0	91.05	351.29	9,447.3	1,375.8	-396.2	1,425.9	0.00	0.00	0.00
10,800.0	91.05	351.29	9,445.5	1,474.7	-411.3	1,525.8	0.00	0.00	0.00
10,900.0	91.05	351.29	9,443.6	1,573.5	-426.4	1,625.7	0.00	0.00	0.00
11,000.0	91.05	351.29	9,441.8	1,672.3	-441.6	1,725.6	0.00	0.00	0.00
11,100.0	91.05	351.29	9,440.0	1,771.2	-456.7	1,825.5	0.00	0.00	0.00
11,200.0	91.05	351.29	9,438.1	1,870.0	-471.9	1,925.4	0.00	0.00	0.00
11,300.0	91.05	351.29	9,436.3	1,968.8	-487.0	2,025.3	0.00	0.00	0.00
11,400.0	91.05	351.29	9,434.4	2,067.7	-502.2	2,125.3	0.00	0.00	0.00
11,500.0	91.05	351.29	9,432.6	2,166.5	-517.3	2,225.2	0.00	0.00	0.00
11,600.0	91.05	351.29	9,430.8	2,265.3	-532.5	2,325.1	0.00	0.00	0.00
11,700.0	91.05	351.29	9,428.9	2,364.1	-547.6	2,425.0	0.00	0.00	0.00
11,800.0	91.05	351.29	9,427.1	2,463.0	-562.7	2,524.9	0.00	0.00	0.00
11,900.0	91.05	351.29	9,425.2	2,561.8	-577.9	2,624.8	0.00	0.00	0.00
12,000.0	91.05	351.29	9,423.4	2,660.6	-593.0	2,724.7	0.00	0.00	0.00
12,100.0	91.05	351.29	9,421.6	2,759.5	-608.2	2,824.6	0.00	0.00	0.00
12,200.0	91.05	351.29	9,419.7	2,858.3	-623.3	2,924.6	0.00	0.00	0.00
12,300.0	91.05	351.29	9,417.9	2,957.1	-638.5	3,024.5	0.00	0.00	0.00
12,400.0	91.05	351.29	9,416.0	3,055.9	-653.6	3,124.4	0.00	0.00	0.00
12,500.0	91.05	351.29	9,414.2	3,154.8	-668.8	3,224.3	0.00	0.00	0.00
12,600.0	91.05	351.29	9,412.4	3,253.6	-683.9	3,324.2	0.00	0.00	0.00
12,700.0	91.05	351.29	9,410.5	3,352.4	-699.0	3,424.1	0.00	0.00	0.00
12,800.0	91.05	351.29	9,408.7	3,451.3	-714.2	3,524.0	0.00	0.00	0.00
12,900.0	91.05	351.29	9,406.8	3,550.1	-729.3	3,623.9	0.00	0.00	0.00

DDC
Well Planning Report



Database: EDM 5000.1 Single User Db	Local Co-ordinate Reference: Well Querecho 28 OB Federal Com #1H
Company: Mewbourne Oil Co	TVD Reference: Well @ 3734.0usft (Patterson #75)
Project: Lea County, New Mexico	MD Reference: Well @ 3734.0usft (Patterson #75)
Site: Sec 28-18S-32E	North Reference: Grid
Well: Querecho 28 OB Federal Com #1H	Survey Calculation Method: Minimum Curvature
Wellbore: Wellbore #1	
Design: Design #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)
13,000.0	91.05	351.29	9,405.0	3,648.9	-744.5	3,723.9	0.00	0.00	0.00
13,100.0	91.05	351.29	9,403.2	3,747.8	-759.6	3,823.8	0.00	0.00	0.00
13,200.0	91.05	351.29	9,401.3	3,846.6	-774.8	3,923.7	0.00	0.00	0.00
13,300.0	91.05	351.29	9,399.5	3,945.4	-789.9	4,023.6	0.00	0.00	0.00
13,400.0	91.05	351.29	9,397.6	4,044.2	-805.0	4,123.5	0.00	0.00	0.00
13,500.0	91.05	351.29	9,395.8	4,143.1	-820.2	4,223.4	0.00	0.00	0.00
13,600.0	91.05	351.29	9,394.0	4,241.9	-835.3	4,323.3	0.00	0.00	0.00
13,700.0	91.05	351.29	9,392.1	4,340.7	-850.5	4,423.2	0.00	0.00	0.00
13,800.0	91.05	351.29	9,390.3	4,439.6	-865.6	4,523.1	0.00	0.00	0.00
13,900.0	91.05	351.29	9,388.4	4,538.4	-880.8	4,623.1	0.00	0.00	0.00
14,000.0	91.05	351.29	9,386.6	4,637.2	-895.9	4,723.0	0.00	0.00	0.00
14,100.0	91.05	351.29	9,384.8	4,736.1	-911.1	4,822.9	0.00	0.00	0.00
PBHL @ 14141' MD / 9384' TVD									
14,141.1	91.05	351.29	9,384.0	4,776.7	-917.3	4,863.9	0.00	0.00	0.00

Design Targets

Target Name

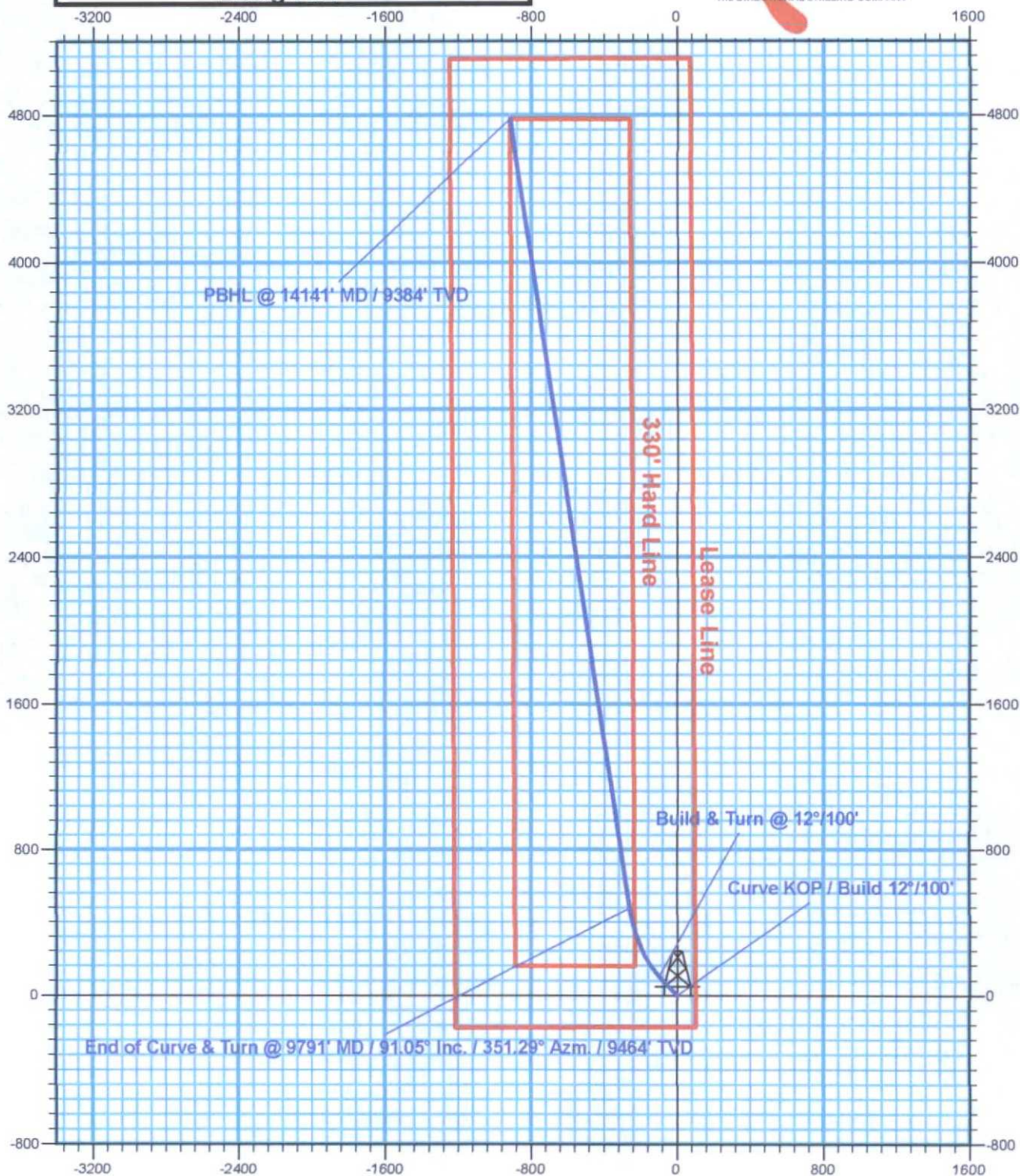
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
PBHL Querecho 28 OB	0.00	0.00	9,384.0	4,776.7	-917.3	627,825.99	673,318.84	32° 43' 29.003 N	103° 46' 11.124 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,953.0	8,953.0	0.0	0.0	Curve KOP / Build 12°/100'
9,328.0	9,290.6	100.8	-97.0	Build & Turn @ 12°/100'
9,791.4	9,464.0	477.9	-258.6	End of Curve & Turn @ 9791' MD / 91.05° Inc. / 351.29° Azm. / 9464' TVD
14,141.1	9,384.0	4,776.7	-917.3	PBHL @ 14141' MD / 9384' TVD

Mewbourne Oil Company

Lea County, New Mexico
Sec 28-18S-32E
Querecho 28 OB Federal Com #1H
Design #1



Mewbourne Oil Company

Lea County, New Mexico

Sec 28-18S-32E

Querecho 28 OB Federal Com #1H

Design #1

