Form C-101

<u>District I</u> 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 Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. Santa Fe, NM 87505

August 1, 2011

Permit 299024

APPLICATION FOR PERMIT TO DRILL	., RE-ENTER, DEEPEN	I, PLUGBACK	, OR ADD A ZONE
---------------------------------	---------------------	-------------	-----------------

•	EOG RESOURCES INC P.O. Box 2267											2. OGRID Number 7377 3. API Number			
	Midland, TX 79702										30-025-49691				
	pperty Code 5. Property Name GRACE 16 STATE COM									6. Well I	No. 901H				
						7. 9	Surfac	ce Location							
UL - Lot		Section	Township	Ran	ige	Lot Idn		Feet From	N/S Line	Feet From	E/W Line	County			
	Р	16	1	8S	33E		Р	870	S	391	E		Lea		
						8. Propose	d Bot	ttom Hole Location							
UL - Lot		Section	Township	Rang	ge	Lot Idn		Feet From	N/S Line	Feet From	E/W Line	County	•		
	Α	16	1 4	3S	33E	A		100	N	1000	E		Lea		

5.1 confinition	
CORBIN:WOLFCAMP, SOLITH	13320

#### Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL	· ·	State	3869
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date
N	16786	Wolfcamp		1/13/2022
Depth to Ground water		Distance from nearest fresh wat	er well	Distance to nearest surface water

#### ■ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	13.5	10.75	40.5	1771	590	0
Int1	9.875	8.75	38.5	12000	1940	0
Prod	7.875	6	24.5	14400	853	4789
Prod	7.875	6	24.5	16786	800	11500

#### Casing/Cement Program: Additional Comments

PILOT HOLE 11,383'-14,400 - Plug: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 4,789')

22 Proposed Blowout Prevention Program

	22. Proposed Blowout Freve	nuon riogiam	
Туре	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	3000	

knowledge and b		true and complete to the best of my  IMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATI	ON DIVISION	
Printed Name:	Electronically filed by Kay Maddox		Approved By:	Paul F Kautz		
Title:	Regulatory Agent		Title:	Geologist		
Email Address:	kay_maddox@eogresources.com	1	Approved Date:	12/30/2021	Expiration Date: 12/30/2023	
Date:	12/21/2021	Phone: 432-686-3658	Conditions of Approval Attached			

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 Rd., Aztec, NM 87410
Phone: (505) 343-6178 Fax: (305) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3406 Fax: (505) 476-3462

# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

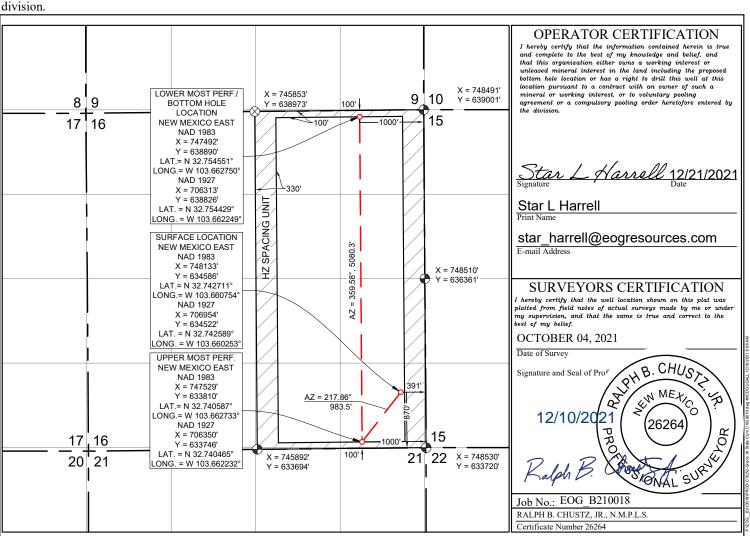
Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

A	PI Number			Pool Code			Pool Name		
30-025- <b>49</b>	691			13320		CORBIN	WOLFCAME	P, SOUTH	
Property Co	ode		•		Property Name			Well Nun	nber
33118	0			GF	RACE 16 STAT	E COM		901F	ł
OGRID N	0.				Operator Name			Elevation	on
7377				EO	G RESOURCE	S, INC.		3869	9'
	•				Surface Locat	ion		•	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Р	16	18 S	33 E		870	SOUTH	391	EAST	LEA
			Bott	om Hole I	Location If Diff	erent From Surfac	e		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	16	18 S	33 E		EAST	LEA			
Dedicated Acres	Joint or	Infill	Consolidated Coo	le Orde	r No.	•			
320.00									

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



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1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

# **State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505**

Form APD Conditions

Permit 299024

#### PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
EOG RESOURCES INC [7377]	30-025-49691
P.O. Box 2267	Well:
Midland, TX 79702	GRACE 16 STATE COM #901H

OCD	Condition
Reviewer	
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh
	water zone or zones and shall immediately set in cement the water protection string
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud,
	drilling fluids and solids must be contained in a steel closed loop system
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface 2) PRODUCTION CASING - Cement must tie back into intermediate casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud



# **Midland**

Lea County, NM (NAD 83 NME) Grace 16 State Com #901H

OH

Plan: Plan #0.1

# **Standard Planning Report**

16 December, 2021

# eog resources

#### **EOG Resources**

#### Planning Report

PEDM Database: Company: Midland

Project: Lea County, NM (NAD 83 NME)

Site: Grace 16 State Com Well: #901H

Wellbore: OH Plan #0.1 Design:

**Local Co-ordinate Reference:** 

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well #901H

KB = 26' @ 3895.0usft KB = 26' @ 3895.0usft

Minimum Curvature

Project Lea County, NM (NAD 83 NME)

Map System: Geo Datum:

Map Zone:

**Well Position** 

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Grace 16 State Com Site

Site Position: From: Мар Northing: Easting:

634,587.00 usft 748,199.00 usft

Latitude: Longitude:

32.7427113°N 103.6605391°W

**Position Uncertainty:** 0.0 usft Slot Radius: 13-3/16 "

Well #901H

> +N/-S +E/-W

0.0 usft 0.0 usft 0.0 usft

Northing: Easting:

634,586.00 usft 748,133.00 usft Latitude: Longitude:

32.7427097°N 103.6607538°W

3,869.0 usft

**Position Uncertainty** Wellhead Elevation: usft **Ground Level:** 

0.36° **Grid Convergence:** 

ОН Wellbore

**Model Name** Declination Field Strength Magnetics Sample Date Dip Angle (°) (°) (nT) IGRF2020 47,735.76228725 12/16/2021 6.57 60.34

Design Plan #0.1

Audit Notes:

Version:

Phase:

PLAN

Tie On Depth:

0.0

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 351.53 0.0 0.0 0.0

Plan Survey Tool Program

12/16/2021 Date

**Depth From** Depth To

(usft) (usft)

Survey (Wellbore)

**Tool Name** 

Remarks

0.0 16,785.8 EOG MWD+IFR1 Plan #0.1 (OH)

MWD + IFR1

# beog resources

### **EOG Resources**

Planning Report

Database: PEDM

Company: Midland
Project: Lea County, NM (NAD 83 NME)

Site: Grace 16 State Com

 Well:
 #901H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #901H

KB = 26' @ 3895.0usft KB = 26' @ 3895.0usft

Grid

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	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,906.3	20.13	216.18	2,885.8	-141.2	-103.3	2.00	2.00	0.00	216.18	
4,863.3	20.13	216.18	4,723.2	-684.8	-500.7	0.00	0.00	0.00	0.00	
5,869.6	0.00	0.00	5,709.0	-826.0	-604.0	2.00	-2.00	0.00	180.00	
11,383.1	0.00	0.00	11,222.5	-826.0	-604.0	0.00	0.00	0.00	0.00	KOP(Grace 16 State
11,603.6	26.46	0.00	11,435.2	-776.0	-604.0	12.00	12.00	0.00	0.00	FTP(Grace 16 State 0
12,133.1	90.00	359.57	11,699.9	-348.5	-606.2	12.00	12.00	-0.08	-0.48	
16,785.8	90.00	359.57	11,700.0	4,304.0	-641.0	0.00	0.00	0.00	0.00	PBHL(Grace 16 State

# eog resources

### **EOG Resources**

### **Planning Report**

Database: PEDM Company: Midland

Project: Lea County, NM (NAD 83 NME)

Site: Grace 16 State Com

 Well:
 #901H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #901H

KB = 26' @ 3895.0usft KB = 26' @ 3895.0usft

Grid

anned 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	2.00	216.18	2,000.0	-1.4	-1.0	-1.2	2.00	2.00	0.00
2,100.0	4.00	216.18	2,099.8	-5.6	-4.1	-5.0	2.00	2.00	0.00
2,200.0	6.00	216.18	2,199.5	-12.7	-9.3	-11.2	2.00	2.00	0.00
2,300.0	8.00	216.18	2,298.7	-22.5	-16.5	-19.8	2.00	2.00	0.00
2,400.0	10.00	216.18	2,397.5	-35.1	-25.7	-31.0	2.00	2.00	0.00
2,500.0	12.00	216.18	2,495.6	-50.5	-37.0	-44.5	2.00	2.00	0.00
2,600.0	14.00	216.18	2,593.1	-68.7	-50.2	-60.5	2.00	2.00	0.00
2,700.0	16.00	216.18	2,689.6	-89.6	-65.5	-79.0	2.00	2.00	0.00
2,800.0	18.00	216.18	2,785.3	-113.2	-82.8	-99.8	2.00	2.00	0.00
2,906.3	20.13	216.18	2,885.8	-141.2	-103.3	-124.5	2.00	2.00	0.00
3,000.0	20.13	216.18	2,973.7	-167.2	-122.3	-147.4	0.00	0.00	0.00
3,100.0	20.13	216.18	2,973.7 3,067.6	-107.2	-122.3 -142.6	-147.4 -171.9	0.00	0.00	0.00
3,200.0	20.13	216.18	3,161.5	-222.8	-142.0	-171.9	0.00	0.00	0.00
3,300.0	20.13	216.18	3,255.4	-222.6 -250.6	-183.2	-190.4	0.00	0.00	0.00
		216.18			-103.2 -203.5	-220.6 -245.3	0.00		
3,400.0	20.13		3,349.3	-278.3				0.00	0.00
3,500.0	20.13	216.18	3,443.2	-306.1	-223.8	-269.8	0.00	0.00	0.00
3,600.0	20.13	216.18	3,537.1	-333.9	-244.2	-294.3	0.00	0.00	0.00
3,700.0	20.13	216.18	3,631.0	-361.7	-264.5	-318.8	0.00	0.00	0.00
3,800.0	20.13	216.18	3,724.9	-389.4	-284.8	-343.2	0.00	0.00	0.00
3,900.0	20.13	216.18	3,818.8	-417.2	-305.1	-367.7	0.00	0.00	0.00
4,000.0	20.13	216.18	3,912.6	-445.0	-325.4	-392.2	0.00	0.00	0.00
4,100.0	20.13	216.18	4,006.5	-472.8	-345.7	-416.7	0.00	0.00	0.00
4,200.0	20.13	216.18	4,100.4	-500.5	-366.0	-410.7 -441.2	0.00	0.00	0.00
4,300.0	20.13	216.18	4,194.3	-528.3	-386.3	-465.6	0.00	0.00	0.00
4,400.0	20.13	216.18	4,194.3	-556.1	-406.6	-490.1	0.00	0.00	0.00
4,500.0	20.13	216.18	4,382.1	-583.9	-426.9	-514.6	0.00	0.00	0.00
4,600.0	20.13	216.18	4,476.0	-611.6	-447.3	-539.1	0.00	0.00	0.00
4,700.0	20.13	216.18	4,569.9	-639.4	-467.6	-563.6	0.00	0.00	0.00
4,800.0	20.13	216.18	4,663.8	-667.2	-487.9	-588.1	0.00	0.00	0.00
4,863.3	20.13	216.18	4,723.2	-684.8	-500.7	-603.6	0.00	0.00	0.00
4,900.0	19.39	216.18	4,757.8	-694.8	-508.1	-612.4	2.00	-2.00	0.00
5,000.0	17.39	216.18	4,852.7	-720.3	-526.7	-634.8	2.00	-2.00	0.00
5,100.0	15.39	216.18	4,948.6	-720.3 -743.0	-543.3	-654.9	2.00	-2.00	0.00
5,200.0	13.39	216.18	5,045.4	-763.1	-558.0	-672.6	2.00	-2.00	0.00

# beog resources

### **EOG Resources**

### Planning Report

Database: PEDM Company: Midland

Project: Lea County, NM (NAD 83 NME)

Site: Grace 16 State Com

 Well:
 #901H

 Wellbore:
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 Design:
 Plan #0.1

Local Co-ordinate Reference:

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North Reference:

Survey Calculation Method:

Well #901H

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Grid

anned 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)
5,300.0	11.39	216.18	5,143.1	-780.4	-570.7	-687.9	2.00	-2.00	0.00
5,400.0	9.39	216.18	5,241.5	-795.0	-581.3	-700.7	2.00	-2.00	0.00
5,500.0		216.18	5,340.4	-806.8	-589.9	-711.1	2.00	-2.00	0.00
5,600.0		216.18	5,439.8	-815.8	-596.5	-719.0	2.00	-2.00	0.00
5,700.0		216.18	5,539.5	-821.9	-601.0	-724.4	2.00	-2.00	0.00
5,800.0	1.39	216.18	5,639.4	-825.3	-603.5	-727.4	2.00	-2.00	0.00
5,869.6		0.00	5,709.0	-826.0	-604.0	-728.0	2.00	-2.00	0.00
5,900.0		0.00	5,739.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,000.0		0.00	5,839.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,100.0		0.00	5,939.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,039.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,139.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,400.0		0.00	6,239.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,500.0		0.00	6,339.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,600.0		0.00	6,439.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,539.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,639.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
6,900.0		0.00	6,739.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,000.0		0.00	6,839.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,100.0	0.00	0.00	6,939.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,039.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,139.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,400.0		0.00	7,239.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,500.0		0.00	7,339.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,600.0		0.00	7,439.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,539.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,639.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
7,900.0		0.00	7,739.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,000.0		0.00	7,839.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,100.0		0.00	7,939.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,039.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,139.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,400.0		0.00	8,239.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,500.0		0.00	8,339.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,600.0		0.00	8,439.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,539.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,639.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,739.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,000.0		0.00	8,839.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,100.0		0.00	8,939.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,039.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,139.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,400.0		0.00	9,239.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,500.0		0.00	9,339.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,600.0		0.00	9,439.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,539.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,639.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
9,900.0		0.00	9,739.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,000.0		0.00	9,839.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,100.0		0.00	9,939.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,200.0	0.00	0.00	10,039.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,139.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,400.0		0.00	10,239.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,500.0		0.00	10,339.4	-826.0	-604.0	-728.0	0.00	0.00	0.00

### **EOG Resources**

# Planning Report

**b**eog resources

Database: Company: PEDM Midland

Project: Lea County, NM (NAD 83 NME)

Site: Grace 16 State Com

 Well:
 #901H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #901H

KB = 26' @ 3895.0usft KB = 26' @ 3895.0usft

Grid

esign:	FIAII #U. I								
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)
10,600.0	0.00	0.00	10,439.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,700.0	0.00	0.00	10,539.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,800.0	0.00	0.00	10,639.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
10,900.0	0.00	0.00	10,739.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
11,000.0	0.00	0.00	10,839.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
11,100.0 11,200.0	0.00 0.00	0.00 0.00	10,939.4 11,039.4	-826.0 -826.0	-604.0 -604.0	-728.0 -728.0	0.00	0.00 0.00	0.00 0.00
							0.00		
11,300.0	0.00	0.00	11,139.4	-826.0	-604.0	-728.0	0.00	0.00	0.00
11,383.1	0.00	0.00	11,222.5	-826.0	-604.0	-728.0	0.00	0.00	0.00
11,400.0	2.02	0.00	11,239.4	-825.7	-604.0	-727.7	12.00	12.00	0.00
11,425.0 11,450.0	5.02 8.02	0.00 0.00	11,264.3 11,289.1	-824.2 -821.3	-604.0 -604.0	-726.2 -723.4	12.00 12.00	12.00 12.00	0.00 0.00
11,475.0	11.02	0.00	11,313.8	-817.2	-604.0	-719.3	12.00	12.00	0.00
11,500.0	14.02	0.00	11,338.2	-811.8	-604.0	-713.9	12.00	12.00	0.00
11,525.0	17.02	0.00	11,362.3 11,386.0	-805.1	-604.0	-707.3	12.00	12.00	0.00
11,550.0 11,575.0	20.02 23.03	0.00 0.00	11,409.2	-797.1	-604.0 -604.0	-699.5 -690.4	12.00 12.00	12.00 12.00	0.00 0.00
				-788.0					
11,600.0	26.03	0.00	11,432.0	-777.6	-604.0	-680.1	12.00	12.00	0.00
11,603.6	26.46	0.00	11,435.2	-776.0	-604.0	-678.6	12.00	12.00	0.00
11,625.0	29.03	359.96	11,454.1	-766.0	-604.0	-668.7	12.00	12.00	-0.21
11,650.0 11,675.0	32.03 35.03	359.91	11,475.7	-753.3	-604.0	-656.1	12.00	12.00	-0.17
11,075.0		359.88	11,496.5	-739.5	-604.0	-642.5	12.00	12.00	-0.15
11,700.0	38.03	359.84	11,516.6	-724.7	-604.1	-627.8	12.00	12.00	-0.13
11,725.0	41.03	359.82	11,535.9	-708.7	-604.1	-612.0	12.00	12.00	-0.11
11,750.0	44.03	359.79	11,554.3	-691.9	-604.2	-595.3	12.00	12.00	-0.10
11,775.0	47.03	359.77	11,571.8	-674.0	-604.3	-577.7 550.1	12.00	12.00	-0.09
11,800.0	50.03	359.75	11,588.4	-655.3	-604.3	-559.1	12.00	12.00	-0.08
11,825.0	53.03	359.73	11,603.9	-635.7	-604.4	-539.7	12.00	12.00	-0.07
11,850.0	56.03	359.72	11,618.4	-615.4	-604.5	-519.6	12.00	12.00	-0.07
11,875.0	59.03	359.70	11,631.9	-594.3	-604.6	-498.7	12.00	12.00	-0.06
11,900.0	62.03	359.68	11,644.2	-572.5	-604.7	-477.2	12.00	12.00	-0.06
11,925.0	65.03	359.67	11,655.3	-550.1	-604.9	-455.0	12.00	12.00	-0.06
11,950.0	68.03	359.66	11,665.3	-527.2	-605.0	-432.3	12.00	12.00	-0.05
11,975.0	71.02	359.64	11,674.0	-503.8	-605.1	-409.2	12.00	12.00	-0.05
12,000.0	74.02	359.63	11,681.5	-479.9	-605.3	-385.5	12.00	12.00	-0.05
12,025.0 12,050.0	77.02 80.02	359.62 359.61	11,687.8 11,692.7	-455.7 -431.2	-605.5 -605.6	-361.6 -337.3	12.00 12.00	12.00 12.00	-0.05 -0.05
				-431.2		-337.3			
12,075.0	83.02	359.60	11,696.4	-406.5	-605.8	-312.9	12.00	12.00	-0.05
12,100.0	86.02	359.59	11,698.8	-381.6	-606.0	-288.2	12.00	12.00	-0.05
12,125.0	89.02	359.58	11,699.9	-356.7	-606.2	-263.5	12.00	12.00	-0.04
12,133.1 12,200.0	90.00 90.00	359.57 359.57	11,699.9 11,699.9	-348.5 -281.7	-606.2 -606.7	-255.4 -189.2	12.00 0.00	12.00 0.00	-0.04 0.00
12,300.0	90.00	359.57	11,699.9	-181.7	-607.5	-90.2	0.00	0.00	0.00
12,400.0	90.00	359.57	11,699.9	-81.7	-608.2	8.8	0.00	0.00	0.00
12,500.0	90.00	359.57 350.57	11,699.9	18.3	-609.0	107.8	0.00	0.00	0.00
12,600.0 12,700.0	90.00 90.00	359.57 359.57	11,700.0 11,700.0	118.3 218.3	-609.7 -610.4	206.8 305.9	0.00 0.00	0.00 0.00	0.00 0.00
12,800.0	90.00	359.57	11,700.0	318.3	-611.2	404.9	0.00	0.00	0.00
12,900.0	90.00	359.57	11,700.0	418.3	-611.9	503.9	0.00	0.00	0.00
13,000.0	90.00	359.57 350.57	11,700.0	518.3 618.3	-612.7	602.9	0.00	0.00	0.00
13,100.0 13,200.0	90.00 90.00	359.57 359.57	11,700.0 11,700.0	618.3 718.3	-613.4 -614.2	701.9 800.9	0.00 0.00	0.00 0.00	0.00 0.00
13,300.0	90.00	359.57	11,700.0	818.3	-614.9	900.0	0.00	0.00	0.00
13,400.0	90.00	359.57	11,700.0	918.3	-615.7	999.0	0.00	0.00	0.00

# **EOG Resources**

Planning Report

**b**eog resources

Database: Company:

Project:

PEDM Midland

Lea County, NM (NAD 83 NME)

Site: Grace 16 State Com

 Well:
 #901H

 Wellbore:
 OH

 Design:
 Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

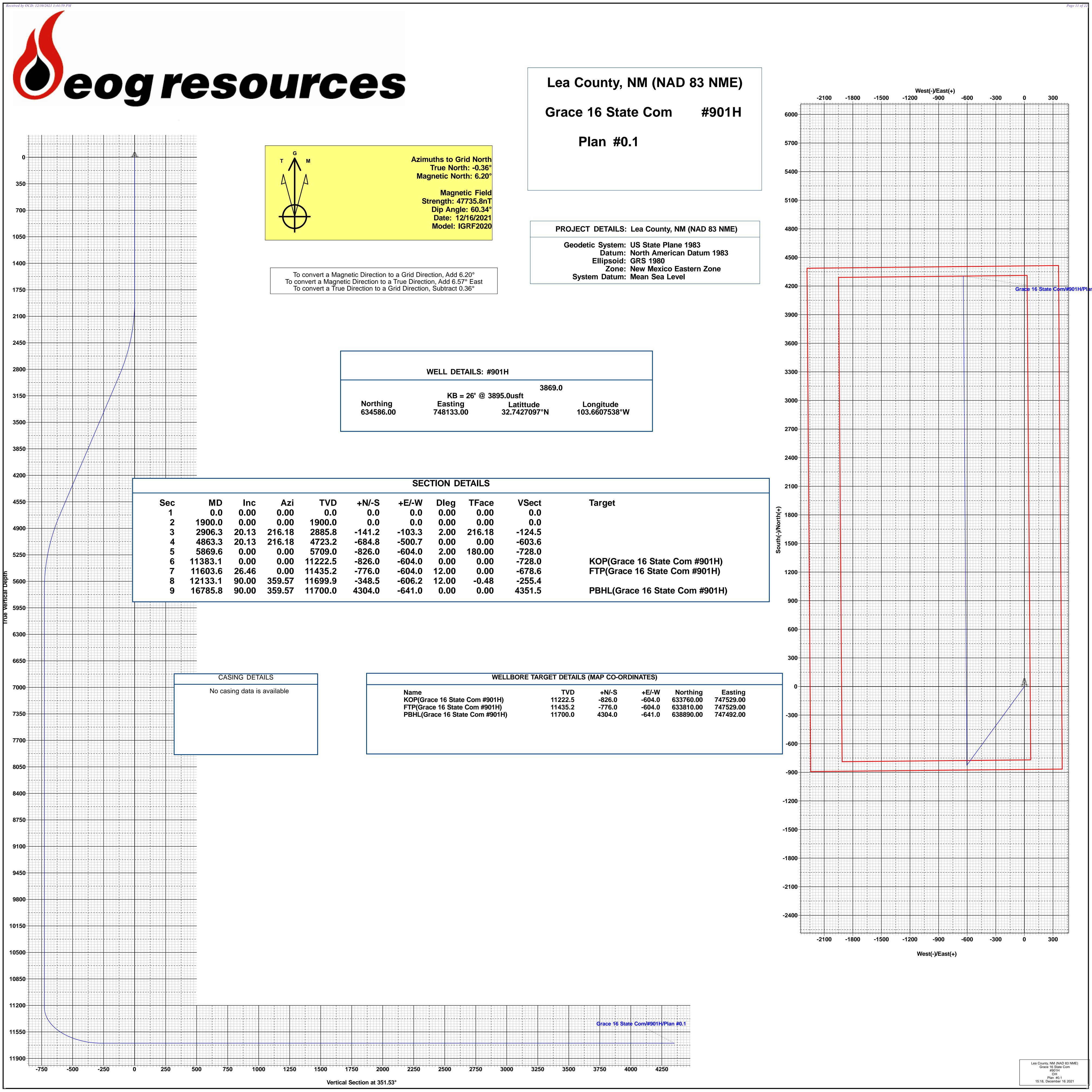
Well #901H

KB = 26' @ 3895.0usft KB = 26' @ 3895.0usft

Grid

13,500.0 90.00 359.57 11,700.0 1,018.3 -616.4 1,098.0 0.00 0.00 0.00 13,600.0 90.00 359.57 11,700.0 1,118.3 -617.2 1,197.0 0.00 0.00 0.00 13,700.0 90.00 359.57 11,700.0 1,118.3 -617.9 1,296.0 0.00 0.00 0.00 0.01 13,800.0 90.00 359.57 11,700.0 1,318.3 -618.7 1,395.0 0.00 0.00 0.00 0.00 13,900.0 90.00 359.57 11,700.0 1,318.3 -618.4 1,395.0 0.00 0.00 0.00 0.00 14,000.0 90.00 359.57 11,700.0 1,518.3 -620.2 1,593.1 0.00 0.00 0.00 0.01 14,000.0 90.00 359.57 11,700.0 1,518.3 -620.2 1,593.1 0.00 0.00 0.00 0.01 14,100.0 90.00 359.57 11,700.0 1,718.3 -620.2 1,593.1 0.00 0.00 0.00 0.00 14,200.0 90.00 359.57 11,700.0 1,718.3 -621.7 1,791.1 0.00 0.00 0.00 14,400.0 90.00 359.57 11,700.0 1,718.3 -621.7 1,791.1 0.00 0.00 0.00 14,400.0 90.00 359.57 11,700.0 1,918.3 -623.2 1,989.1 0.00 0.00 0.00 14,400.0 90.00 359.57 11,700.0 1,918.3 -623.9 1,892.1 0.00 0.00 0.00 14,400.0 90.00 359.57 11,700.0 2,018.3 -623.9 2,088.2 0.00 0.00 0.00 14,600.0 90.00 359.57 11,700.0 2,118.3 -623.9 2,088.2 0.00 0.00 0.00 14,600.0 90.00 359.57 11,700.0 2,118.3 -623.9 2,088.2 0.00 0.00 0.00 14,700.0 90.00 359.57 11,700.0 2,118.3 -624.2 1,898.1 0.00 0.00 0.00 14,700.0 90.00 359.57 11,700.0 2,118.3 -626.2 2,385.2 0.00 0.00 0.00 14,700.0 90.00 359.57 11,700.0 2,218.3 -626.2 2,385.2 0.00 0.00 0.00 14,700.0 90.00 359.57 11,700.0 2,218.3 -626.2 2,385.2 0.00 0.00 0.00 0.00 14,700.0 90.00 359.57 11,700.0 2,318.3 -626.2 2,385.2 0.00 0.00 0.00 15,000.0 90.00 359.57 11,700.0 2,318.3 -626.2 2,385.2 0.00 0.00 0.00 0.00 15,000 90.00 359.57 11,700.0 2,318.3 -626.2 2,385.2 0.00 0.00 0.00 0.00 15,000 90.00 359.57 11,700.0 2,318.3 -626.2 2,385.2 0.00 0.00 0.00 0.00 15,000 90.00 359.57 11,700.0 3,418.2 -629.9 2,880.3 0.00 0.00 0.00 0.00 15,000 90.00 359.57 11,700.0 3,118.2 -632.1 3,177.3 0.00 0.00 0.00 15,000 90.00 359.57 11,700.0 3,118.2 -633.6 3,375.4 0.00 0.00 0.00 15,000 90.00 359.57 11,700.0 3,318.2 -633.6 3,375.4 0.00 0.00 0.00 0.00 15,000 90.00 359.57 11,700.0 3,318.2 -633.6 3,771.4 0.00 0.00 0.00 15,000 90.00 359.57 11,700.0 3,818.2 -633.6 3,771.4 0.00 0.00 0.00 0										
Depth   Inclination   Azimuth   Commons   Co	Planned Survey									
13,600,0 90.00 359.57 11,700,0 1,118.3 -617.2 1,197.0 0.00 0.00 0.00 13,700,0 90.00 359.57 11,700,0 1,218.3 -617.9 1,296.0 0.00 0.00 0.00 0.01 13,800,0 90.00 359.57 11,700,0 1,318.3 -618.7 1,395.0 0.00 0.00 0.00 13,900,0 90.00 359.57 11,700,0 1,418.3 -619.4 1,494.1 0.00 0.00 0.00 14,400,0 90.00 359.57 11,700,0 1,518.3 -620.2 1,593.1 0.00 0.00 0.00 14,200,0 90.00 359.57 11,700,0 1,518.3 -620.2 1,593.1 0.00 0.00 0.00 14,200,0 90.00 359.57 11,700,0 1,718.3 -620.2 1,593.1 0.00 0.00 0.00 0.00 14,200,0 90.00 359.57 11,700,0 1,718.3 -621.7 1,791.1 0.00 0.00 0.00 0.00 14,400,0 90.00 359.57 11,700,0 1,918.3 -622.4 1,890.1 0.00 0.00 0.00 0.00 14,500,0 90.00 359.57 11,700,0 1,918.3 -623.9 2,088.2 0.00 0.00 0.00 14,500,0 90.00 359.57 11,700,0 2,118.3 -623.9 2,088.2 0.00 0.00 0.00 14,600,0 90.00 359.57 11,700,0 2,118.3 -622.4 2,286.2 0.00 0.00 0.00 14,600,0 90.00 359.57 11,700,0 2,118.3 -622.4 2,286.2 0.00 0.00 0.00 14,600,0 90.00 359.57 11,700,0 2,118.3 -624.7 2,187.2 0.00 0.00 0.00 14,600,0 90.00 359.57 11,700,0 2,218.3 -625.4 2,286.2 0.00 0.00 0.00 14,800,0 90.00 359.57 11,700,0 2,218.3 -625.4 2,286.2 0.00 0.00 0.00 15,000,0 90.00 359.57 11,700,0 2,218.3 -625.4 2,286.2 0.00 0.00 0.00 15,000,0 90.00 359.57 11,700,0 2,318.3 -626.2 2,385.2 0.00 0.00 0.00 15,000,0 90.00 359.57 11,700,0 2,518.3 -626.2 2,385.2 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 2,518.3 -626.2 2,385.2 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 2,518.3 -626.2 2,385.2 0.00 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 2,518.2 -629.9 2,884.2 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 2,118.2 -629.1 2,781.3 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 3,118.2 -638.4 2,682.3 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 2,118.2 -639.6 3,14 3,078.3 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 3,118.2 -638.4 3,474.4 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 3,118.2 -638.6 3,375.4 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 3,118.2 -638.6 3,771.4 0.00 0.00 0.00 15,100,0 90.00 359.57 11,700,0 3,118.2 -638.6 3,771.4 0.00 0.00 0.00 16,100,0 90.00	Depth			Depth			Section	Rate	Rate	
13,700.0         90.00         359.57         11,700.0         1,218.3         -617.9         1,296.0         0.00         0.00         0.0           13,800.0         90.00         359.57         11,700.0         1,318.3         -618.7         1,395.0         0.00         0.00         0.0           14,000.0         90.00         359.57         11,700.0         1,418.3         -619.4         1,494.1         0.00         0.00         0.0           14,100.0         90.00         359.57         11,700.0         1,618.3         -620.9         1,692.1         0.00         0.00         0.0         0.0           14,200.0         90.00         359.57         11,700.0         1,618.3         -620.9         1,692.1         0.00         0.00         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0										0.00
13,800.0       90.00       359.57       11,700.0       1,318.3       -618.7       1,395.0       0.00       0.00       0.00         13,900.0       90.00       359.57       11,700.0       1,418.3       -619.4       1,494.1       0.00       0.00       0.00         14,000.0       90.00       359.57       11,700.0       1,518.3       -620.9       1,593.1       0.00       0.00       0.00         14,200.0       90.00       359.57       11,700.0       1,718.3       -621.7       1,791.1       0.00       0.00       0.00         14,200.0       90.00       359.57       11,700.0       1,718.3       -621.7       1,791.1       0.00       0.00       0.00         14,400.0       90.00       359.57       11,700.0       1,918.3       -622.4       1,989.1       0.00       0.00       0.00         14,500.0       90.00       359.57       11,700.0       2,018.3       -623.9       2,088.2       0.00       0.00       0.00         14,600.0       90.00       359.57       11,700.0       2,218.3       -624.7       2,286.2       0.00       0.00       0.00         14,800.0       90.00       359.57       11,700.0       2,318.3       <	13,600.0	90.00	359.57	11,700.0	1,118.3	-617.2	1,197.0	0.00	0.00	0.00
13,900.0 90.00 359.57 11,700.0 1,418.3 -619.4 1,494.1 0.00 0.00 0.0 14,000.0 90.00 359.57 11,700.0 1,518.3 -620.2 1,593.1 0.00 0.00 0.00 14,200.0 90.00 359.57 11,700.0 1,618.3 -620.9 1,692.1 0.00 0.00 0.00 14,200.0 90.00 359.57 11,700.0 1,618.3 -621.7 1,791.1 0.00 0.00 0.00 14,200.0 90.00 359.57 11,700.0 1,818.3 -621.7 1,791.1 0.00 0.00 0.00 14,400.0 90.00 359.57 11,700.0 1,818.3 -622.4 1,890.1 0.00 0.00 0.00 14,400.0 90.00 359.57 11,700.0 1,918.3 -623.9 1,989.1 0.00 0.00 0.00 14,600.0 90.00 359.57 11,700.0 1,918.3 -623.9 1,989.1 0.00 0.00 0.00 0.00 14,600.0 90.00 359.57 11,700.0 2,118.3 -623.9 1,989.1 0.00 0.00 0.00 0.00 14,600.0 90.00 359.57 11,700.0 2,218.3 -625.4 1,287.2 0.00 0.00 0.00 14,700.0 90.00 359.57 11,700.0 2,218.3 -625.4 1,286.2 0.00 0.00 0.00 14,700.0 90.00 359.57 11,700.0 2,218.3 -625.4 1,286.2 0.00 0.00 0.00 14,900.0 90.00 359.57 11,700.0 2,318.3 -626.2 2,385.2 0.00 0.00 0.00 14,900.0 90.00 359.57 11,700.0 2,318.3 -626.9 2,484.2 0.00 0.00 0.00 14,900.0 90.00 359.57 11,700.0 2,318.3 -626.9 2,484.2 0.00 0.00 0.00 15,000.0 90.00 359.57 11,700.0 2,518.3 -626.9 2,484.2 0.00 0.00 0.00 15,000.0 90.00 359.57 11,700.0 2,518.3 -626.9 2,484.2 0.00 0.00 0.00 15,200.0 90.00 359.57 11,700.0 2,518.3 -627.6 2,583.2 0.00 0.00 0.00 15,200.0 90.00 359.57 11,700.0 2,518.2 -628.4 2,682.3 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 2,518.2 -628.4 2,682.3 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 2,918.2 -629.1 2,781.3 0.00 0.00 0.00 15,600.0 90.00 359.57 11,700.0 2,918.2 -631.4 3,078.3 0.00 0.00 0.00 15,600.0 90.00 359.57 11,700.0 3,118.2 -632.1 3,177.3 0.00 0.00 0.00 15,600.0 90.00 359.57 11,700.0 3,118.2 -632.1 3,177.3 0.00 0.00 0.00 0.00 15,600.0 90.00 359.57 11,700.0 3,118.2 -632.1 3,177.3 0.00 0.00 0.00 15,600.0 90.00 359.57 11,700.0 3,118.2 -635.1 3,573.4 0.00 0.00 0.00 15,600.0 90.00 359.57 11,700.0 3,118.2 -636.6 3,771.4 0.00 0.00 0.00 16,000.0 90.00 359.57 11,700.0 3,818.2 -635.1 3,573.4 0.00 0.00 0.00 0.00 16,000 90.00 359.57 11,700.0 3,818.2 -636.6 3,771.4 0.00 0.00 0.00 16,000 90.00 359.57 11,700.0	13,700.0	90.00	359.57	11,700.0	1,218.3	-617.9	1,296.0	0.00	0.00	0.00
14,000.0         90.00         359.57         11,700.0         1,518.3         -620.2         1,593.1         0.00         0.00         0.01           14,100.0         90.00         359.57         11,700.0         1,618.3         -620.9         1,692.1         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00 <td>13,800.0</td> <td>90.00</td> <td>359.57</td> <td>11,700.0</td> <td>1,318.3</td> <td>-618.7</td> <td>1,395.0</td> <td>0.00</td> <td>0.00</td> <td>0.00</td>	13,800.0	90.00	359.57	11,700.0	1,318.3	-618.7	1,395.0	0.00	0.00	0.00
14,100.0       90.00       359.57       11,700.0       1,618.3       -620.9       1,692.1       0.00       0.00       0.00         14,200.0       90.00       359.57       11,700.0       1,718.3       -621.7       1,791.1       0.00       0.00       0.0         14,300.0       90.00       359.57       11,700.0       1,918.3       -622.2       1,989.1       0.00       0.00       0.00         14,600.0       90.00       359.57       11,700.0       2,018.3       -623.2       1,989.1       0.00       0.00       0.00         14,600.0       90.00       359.57       11,700.0       2,018.3       -623.9       2,088.2       0.00       0.00       0.00         14,700.0       90.00       359.57       11,700.0       2,218.3       -624.7       2,187.2       0.00       0.00       0.00         14,800.0       90.00       359.57       11,700.0       2,318.3       -626.4       2,286.2       0.00       0.00       0.00         14,900.0       90.00       359.57       11,700.0       2,418.3       -626.2       2,385.2       0.00       0.00       0.00         15,100.0       90.00       359.57       11,700.0       2,518.3 <t< td=""><td>13,900.0</td><td>90.00</td><td>359.57</td><td>11,700.0</td><td>1,418.3</td><td>-619.4</td><td>1,494.1</td><td>0.00</td><td>0.00</td><td>0.00</td></t<>	13,900.0	90.00	359.57	11,700.0	1,418.3	-619.4	1,494.1	0.00	0.00	0.00
14,200.0         90.00         359.57         11,700.0         1,718.3         -621.7         1,791.1         0.00         0.00         0.01           14,300.0         90.00         359.57         11,700.0         1,818.3         -622.4         1,890.1         0.00         0.00         0.00           14,500.0         90.00         359.57         11,700.0         1,918.3         -623.9         2,088.2         0.00         0.00         0.00         0.00           14,500.0         90.00         359.57         11,700.0         2,118.3         -623.9         2,088.2         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00 <t< td=""><td>14,000.0</td><td>90.00</td><td>359.57</td><td>11,700.0</td><td>1,518.3</td><td>-620.2</td><td>1,593.1</td><td>0.00</td><td>0.00</td><td>0.00</td></t<>	14,000.0	90.00	359.57	11,700.0	1,518.3	-620.2	1,593.1	0.00	0.00	0.00
14,300.0 90.00 359.57 11,700.0 1,818.3 -622.4 1,890.1 0.00 0.00 0.01 14,400.0 90.00 359.57 11,700.0 2,018.3 -623.2 1,989.1 0.00 0.00 0.00 14,500.0 90.00 359.57 11,700.0 2,018.3 -623.9 2,088.2 0.00 0.00 0.00 0.00 14,600.0 90.00 359.57 11,700.0 2,118.3 -624.7 2,187.2 0.00 0.00 0.00 0.00 14,700.0 90.00 359.57 11,700.0 2,218.3 -625.4 2,286.2 0.00 0.00 0.00 0.00 0.00 14,800.0 90.00 359.57 11,700.0 2,318.3 -625.4 2,286.2 0.00 0.00 0.00 0.00 0.00 14,900.0 90.00 359.57 11,700.0 2,318.3 -626.2 2,385.2 0.00 0.00 0.00 0.00 14,900.0 90.00 359.57 11,700.0 2,318.3 -626.9 2,484.2 0.00 0.00 0.00 0.00 15,000.0 90.00 359.57 11,700.0 2,518.3 -627.6 2,583.2 0.00 0.00 0.00 0.00 15,000.0 90.00 359.57 11,700.0 2,518.3 -627.6 2,583.2 0.00 0.00 0.00 0.00 15,200.0 90.00 359.57 11,700.0 2,618.2 -628.4 2,682.3 0.00 0.00 0.00 0.00 15,200.0 90.00 359.57 11,700.0 2,718.2 -629.1 2,781.3 0.00 0.00 0.00 0.00 15,300.0 90.00 359.57 11,700.0 2,818.2 -629.1 2,781.3 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 2,818.2 -629.9 2,880.3 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 2,818.2 -629.9 2,880.3 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,018.2 -631.4 3,078.3 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,018.2 -632.1 3,177.3 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,18.2 -632.1 3,177.3 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,318.2 -632.1 3,177.3 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,318.2 -632.1 3,177.3 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,318.2 -632.1 3,177.3 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,318.2 -632.1 3,177.4 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,318.2 -633.6 3,375.4 0.00 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,318.2 -633.6 3,375.4 0.00 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,418.2 -634.4 3,474.4 0.00 0.00 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,818.2 -633.6 3,771.4 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	14,100.0	90.00	359.57	11,700.0	1,618.3	-620.9	1,692.1	0.00	0.00	0.00
14,400.0       90.00       359.57       11,700.0       1,918.3       -623.2       1,989.1       0.00       0.00       0.00         14,500.0       90.00       359.57       11,700.0       2,018.3       -623.9       2,088.2       0.00       0.00       0.0         14,600.0       90.00       359.57       11,700.0       2,118.3       -624.7       2,187.2       0.00       0.00       0.0         14,700.0       90.00       359.57       11,700.0       2,218.3       -625.4       2,286.2       0.00       0.00       0.0         14,800.0       90.00       359.57       11,700.0       2,318.3       -626.2       2,385.2       0.00       0.00       0.0         14,900.0       90.00       359.57       11,700.0       2,418.3       -626.9       2,484.2       0.00       0.00       0.0         15,100.0       90.00       359.57       11,700.0       2,518.3       -627.6       2,583.2       0.00       0.00       0.0         15,200.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.0       0.0         15,300.0       90.00       359.57       11,700.0       2,818.2       -629.	14,200.0	90.00	359.57	11,700.0	1,718.3	-621.7	1,791.1	0.00	0.00	0.00
14,400.0       90.00       359.57       11,700.0       1,918.3       -623.2       1,989.1       0.00       0.00       0.00         14,500.0       90.00       359.57       11,700.0       2,018.3       -623.9       2,088.2       0.00       0.00       0.0         14,600.0       90.00       359.57       11,700.0       2,118.3       -624.7       2,187.2       0.00       0.00       0.0         14,700.0       90.00       359.57       11,700.0       2,218.3       -625.4       2,286.2       0.00       0.00       0.0         14,800.0       90.00       359.57       11,700.0       2,318.3       -626.2       2,385.2       0.00       0.00       0.0         14,900.0       90.00       359.57       11,700.0       2,418.3       -626.9       2,484.2       0.00       0.00       0.0         15,100.0       90.00       359.57       11,700.0       2,518.3       -627.6       2,583.2       0.00       0.00       0.0         15,100.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.0       0.0         15,200.0       90.00       359.57       11,700.0       2,818.2       -629.	14,300.0	90.00	359.57	11,700.0	1,818.3	-622.4	1,890.1	0.00	0.00	0.00
14,500.0       90.00       359.57       11,700.0       2,018.3       -623.9       2,088.2       0.00       0.00       0.0         14,600.0       90.00       359.57       11,700.0       2,118.3       -624.7       2,187.2       0.00       0.00       0.0         14,700.0       90.00       359.57       11,700.0       2,218.3       -625.4       2,286.2       0.00       0.00       0.0         14,900.0       90.00       359.57       11,700.0       2,318.3       -626.2       2,385.2       0.00       0.00       0.0         15,000.0       90.00       359.57       11,700.0       2,518.3       -626.9       2,484.2       0.00       0.00       0.0         15,000.0       90.00       359.57       11,700.0       2,518.3       -627.6       2,583.2       0.00       0.00       0.0         15,200.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.00       0.0         15,300.0       90.00       359.57       11,700.0       2,818.2       -629.9       2,880.3       0.00       0.00       0.0         15,400.0       90.00       359.57       11,700.0       2,918.2       -630.		90.00	359.57	11,700.0		-623.2	1,989.1	0.00	0.00	0.00
14,600.0       90.00       359.57       11,700.0       2,118.3       -624.7       2,187.2       0.00       0.00       0.00         14,700.0       90.00       359.57       11,700.0       2,218.3       -625.4       2,286.2       0.00       0.00       0.00         14,800.0       90.00       359.57       11,700.0       2,318.3       -626.2       2,385.2       0.00       0.00       0.00         15,000.0       90.00       359.57       11,700.0       2,418.3       -626.9       2,484.2       0.00       0.00       0.00         15,000.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.00       0.00         15,100.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.00       0.00         15,200.0       90.00       359.57       11,700.0       2,718.2       -629.1       2,781.3       0.00       0.00       0.0         15,300.0       90.00       359.57       11,700.0       2,918.2       -630.6       2,979.3       0.00       0.00       0.0         15,500.0       90.00       359.57       11,700.0       3,018.2 <td< td=""><td>14,500.0</td><td>90.00</td><td>359.57</td><td>11,700.0</td><td></td><td>-623.9</td><td>2,088.2</td><td>0.00</td><td>0.00</td><td>0.00</td></td<>	14,500.0	90.00	359.57	11,700.0		-623.9	2,088.2	0.00	0.00	0.00
14,700.0       90.00       359.57       11,700.0       2,218.3       -625.4       2,286.2       0.00       0.00       0.00         14,800.0       90.00       359.57       11,700.0       2,318.3       -626.2       2,385.2       0.00       0.00       0.00         14,900.0       90.00       359.57       11,700.0       2,418.3       -626.9       2,484.2       0.00       0.00       0.00         15,000.0       90.00       359.57       11,700.0       2,518.3       -627.6       2,583.2       0.00       0.00       0.00         15,100.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.00       0.00         15,200.0       90.00       359.57       11,700.0       2,718.2       -629.1       2,781.3       0.00       0.00       0.00         15,300.0       90.00       359.57       11,700.0       2,818.2       -629.9       2,880.3       0.00       0.00       0.00         15,500.0       90.00       359.57       11,700.0       3,018.2       -631.4       3,078.3       0.00       0.00       0.00         15,600.0       90.00       359.57       11,700.0       3,181.2       <		90.00	359.57	11,700.0		-624.7	2,187.2	0.00	0.00	0.00
14,900.0       90.00       359.57       11,700.0       2,418.3       -626.9       2,484.2       0.00       0.00       0.01         15,000.0       90.00       359.57       11,700.0       2,518.3       -627.6       2,583.2       0.00       0.00       0.00         15,100.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.00       0.00         15,200.0       90.00       359.57       11,700.0       2,718.2       -629.1       2,781.3       0.00       0.00       0.00         15,300.0       90.00       359.57       11,700.0       2,818.2       -629.9       2,880.3       0.00       0.00       0.00         15,400.0       90.00       359.57       11,700.0       2,918.2       -630.6       2,979.3       0.00       0.00       0.00         15,500.0       90.00       359.57       11,700.0       3,018.2       -631.4       3,078.3       0.00       0.00       0.00         15,700.0       90.00       359.57       11,700.0       3,118.2       -632.1       3,177.3       0.00       0.00       0.00         15,800.0       90.00       359.57       11,700.0       3,318.2       <		90.00	359.57						0.00	0.00
14,900.0       90.00       359.57       11,700.0       2,418.3       -626.9       2,484.2       0.00       0.00       0.01         15,000.0       90.00       359.57       11,700.0       2,518.3       -627.6       2,583.2       0.00       0.00       0.00         15,100.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.00       0.00         15,200.0       90.00       359.57       11,700.0       2,718.2       -629.1       2,781.3       0.00       0.00       0.00         15,300.0       90.00       359.57       11,700.0       2,818.2       -629.9       2,880.3       0.00       0.00       0.00         15,400.0       90.00       359.57       11,700.0       2,918.2       -630.6       2,979.3       0.00       0.00       0.00         15,600.0       90.00       359.57       11,700.0       3,018.2       -631.4       3,078.3       0.00       0.00       0.00         15,700.0       90.00       359.57       11,700.0       3,218.2       -632.1       3,177.3       0.00       0.00       0.00         15,800.0       90.00       359.57       11,700.0       3,318.2       <	14.800.0	90.00	359.57	11.700.0	2.318.3	-626.2	2.385.2	0.00	0.00	0.00
15,100.0       90.00       359.57       11,700.0       2,618.2       -628.4       2,682.3       0.00       0.00       0.01         15,200.0       90.00       359.57       11,700.0       2,718.2       -629.1       2,781.3       0.00       0.00       0.00         15,300.0       90.00       359.57       11,700.0       2,818.2       -629.9       2,880.3       0.00       0.00       0.00         15,400.0       90.00       359.57       11,700.0       2,918.2       -630.6       2,979.3       0.00       0.00       0.00         15,500.0       90.00       359.57       11,700.0       3,018.2       -631.4       3,078.3       0.00       0.00       0.00         15,600.0       90.00       359.57       11,700.0       3,118.2       -631.4       3,078.3       0.00       0.00       0.00         15,700.0       90.00       359.57       11,700.0       3,218.2       -632.1       3,177.3       0.00       0.00       0.00         15,800.0       90.00       359.57       11,700.0       3,318.2       -632.9       3,276.4       0.00       0.00       0.00         15,900.0       90.00       359.57       11,700.0       3,418.2       <	14,900.0	90.00	359.57	11,700.0	2,418.3	-626.9	2,484.2	0.00	0.00	0.00
15,200.0       90.00       359.57       11,700.0       2,718.2       -629.1       2,781.3       0.00       0.00       0.01         15,300.0       90.00       359.57       11,700.0       2,818.2       -629.9       2,880.3       0.00       0.00       0.00         15,400.0       90.00       359.57       11,700.0       2,918.2       -630.6       2,979.3       0.00       0.00       0.00         15,500.0       90.00       359.57       11,700.0       3,018.2       -631.4       3,078.3       0.00       0.00       0.00         15,600.0       90.00       359.57       11,700.0       3,118.2       -632.1       3,177.3       0.00       0.00       0.00         15,700.0       90.00       359.57       11,700.0       3,218.2       -632.9       3,276.4       0.00       0.00       0.00         15,800.0       90.00       359.57       11,700.0       3,318.2       -633.6       3,375.4       0.00       0.00       0.00         15,900.0       90.00       359.57       11,700.0       3,518.2       -635.1       3,573.4       0.00       0.00       0.00         16,100.0       90.00       359.57       11,700.0       3,618.2       <	15,000.0	90.00	359.57	11,700.0	2,518.3	-627.6	2,583.2	0.00	0.00	0.00
15,300.0 90.00 359.57 11,700.0 2,818.2 -629.9 2,880.3 0.00 0.00 0.00 15,400.0 90.00 359.57 11,700.0 2,918.2 -630.6 2,979.3 0.00 0.00 0.00 15,500.0 90.00 359.57 11,700.0 3,018.2 -631.4 3,078.3 0.00 0.00 0.00 15,600.0 90.00 359.57 11,700.0 3,118.2 -632.1 3,177.3 0.00 0.00 0.00 0.00 15,700.0 90.00 359.57 11,700.0 3,218.2 -632.1 3,177.3 0.00 0.00 0.00 0.00 15,700.0 90.00 359.57 11,700.0 3,218.2 -632.9 3,276.4 0.00 0.00 0.00 0.00 15,800.0 90.00 359.57 11,700.0 3,318.2 -633.6 3,375.4 0.00 0.00 0.00 0.00 15,900.0 90.00 359.57 11,700.0 3,318.2 -634.4 3,474.4 0.00 0.00 0.00 0.00 16,000.0 90.00 359.57 11,700.0 3,518.2 -635.1 3,573.4 0.00 0.00 0.00 0.00 16,100.0 90.00 359.57 11,700.0 3,518.2 -635.1 3,573.4 0.00 0.00 0.00 0.00 16,200.0 90.00 359.57 11,700.0 3,618.2 -635.9 3,672.4 0.00 0.00 0.00 0.00 16,200.0 90.00 359.57 11,700.0 3,718.2 -636.6 3,771.4 0.00 0.00 0.00 0.00 16,200.0 90.00 359.57 11,700.0 3,818.2 -636.6 3,771.4 0.00 0.00 0.00 0.00 16,200.0 90.00 359.57 11,700.0 3,818.2 -636.6 3,771.4 0.00 0.00 0.00 0.00 0.00 16,500.0 90.00 359.57 11,700.0 3,918.2 -638.1 3,969.5 0.00 0.00 0.00 0.00 16,500.0 90.00 359.57 11,700.0 3,918.2 -638.1 3,969.5 0.00 0.00 0.00 0.00 16,500.0 90.00 359.57 11,700.0 4,018.2 -638.9 4,068.5 0.00 0.00 0.00 0.00 0.00 16,600.0 90.00 359.57 11,700.0 4,018.2 -638.9 4,068.5 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	15,100.0	90.00	359.57	11,700.0	2,618.2	-628.4	2,682.3	0.00	0.00	0.00
15,400.0       90.00       359.57       11,700.0       2,918.2       -630.6       2,979.3       0.00       0.00       0.01         15,500.0       90.00       359.57       11,700.0       3,018.2       -631.4       3,078.3       0.00       0.00       0.00         15,600.0       90.00       359.57       11,700.0       3,118.2       -632.1       3,177.3       0.00       0.00       0.00         15,700.0       90.00       359.57       11,700.0       3,218.2       -632.9       3,276.4       0.00       0.00       0.00         15,800.0       90.00       359.57       11,700.0       3,318.2       -633.6       3,375.4       0.00       0.00       0.00         15,900.0       90.00       359.57       11,700.0       3,418.2       -634.4       3,474.4       0.00       0.00       0.00         16,000.0       90.00       359.57       11,700.0       3,518.2       -635.1       3,573.4       0.00       0.00       0.00         16,200.0       90.00       359.57       11,700.0       3,618.2       -635.9       3,672.4       0.00       0.00       0.00         16,300.0       90.00       359.57       11,700.0       3,818.2       <	15,200.0	90.00	359.57	11,700.0	2,718.2	-629.1	2,781.3	0.00	0.00	0.00
15,500.0       90.00       359.57       11,700.0       3,018.2       -631.4       3,078.3       0.00       0.00       0.01         15,600.0       90.00       359.57       11,700.0       3,118.2       -632.1       3,177.3       0.00       0.00       0.00         15,700.0       90.00       359.57       11,700.0       3,218.2       -632.9       3,276.4       0.00       0.00       0.00         15,800.0       90.00       359.57       11,700.0       3,318.2       -633.6       3,375.4       0.00       0.00       0.00         15,900.0       90.00       359.57       11,700.0       3,418.2       -634.4       3,474.4       0.00       0.00       0.00         16,000.0       90.00       359.57       11,700.0       3,518.2       -635.1       3,573.4       0.00       0.00       0.00         16,100.0       90.00       359.57       11,700.0       3,618.2       -635.9       3,672.4       0.00       0.00       0.00         16,200.0       90.00       359.57       11,700.0       3,718.2       -636.6       3,771.4       0.00       0.00       0.00         16,300.0       90.00       359.57       11,700.0       3,818.2       <	15,300.0	90.00	359.57	11,700.0	2,818.2	-629.9	2,880.3	0.00	0.00	0.00
15,600.0       90.00       359.57       11,700.0       3,118.2       -632.1       3,177.3       0.00       0.00       0.01         15,700.0       90.00       359.57       11,700.0       3,218.2       -632.9       3,276.4       0.00       0.00       0.00         15,800.0       90.00       359.57       11,700.0       3,318.2       -633.6       3,375.4       0.00       0.00       0.00         15,900.0       90.00       359.57       11,700.0       3,418.2       -634.4       3,474.4       0.00       0.00       0.00         16,000.0       90.00       359.57       11,700.0       3,518.2       -635.1       3,573.4       0.00       0.00       0.00         16,100.0       90.00       359.57       11,700.0       3,618.2       -635.9       3,672.4       0.00       0.00       0.00         16,200.0       90.00       359.57       11,700.0       3,718.2       -636.6       3,771.4       0.00       0.00       0.00         16,300.0       90.00       359.57       11,700.0       3,818.2       -637.4       3,870.4       0.00       0.00       0.00         16,500.0       90.00       359.57       11,700.0       3,918.2       <	15,400.0	90.00	359.57	11,700.0	2,918.2	-630.6	2,979.3	0.00	0.00	0.00
15,700.0       90.00       359.57       11,700.0       3,218.2       -632.9       3,276.4       0.00       0.00       0.01         15,800.0       90.00       359.57       11,700.0       3,318.2       -633.6       3,375.4       0.00       0.00       0.01         15,900.0       90.00       359.57       11,700.0       3,418.2       -634.4       3,474.4       0.00       0.00       0.00         16,000.0       90.00       359.57       11,700.0       3,518.2       -635.1       3,573.4       0.00       0.00       0.00         16,100.0       90.00       359.57       11,700.0       3,618.2       -635.9       3,672.4       0.00       0.00       0.00         16,200.0       90.00       359.57       11,700.0       3,718.2       -636.6       3,771.4       0.00       0.00       0.00         16,300.0       90.00       359.57       11,700.0       3,818.2       -637.4       3,870.4       0.00       0.00       0.00         16,400.0       90.00       359.57       11,700.0       3,918.2       -638.1       3,969.5       0.00       0.00       0.00         16,500.0       90.00       359.57       11,700.0       4,018.2       <	15,500.0	90.00	359.57	11,700.0	3,018.2	-631.4	3,078.3	0.00	0.00	0.00
15,800.0       90.00       359.57       11,700.0       3,318.2       -633.6       3,375.4       0.00       0.00       0.01         15,900.0       90.00       359.57       11,700.0       3,418.2       -634.4       3,474.4       0.00       0.00       0.00         16,000.0       90.00       359.57       11,700.0       3,518.2       -635.1       3,573.4       0.00       0.00       0.00         16,100.0       90.00       359.57       11,700.0       3,618.2       -635.9       3,672.4       0.00       0.00       0.00         16,200.0       90.00       359.57       11,700.0       3,718.2       -636.6       3,771.4       0.00       0.00       0.00         16,300.0       90.00       359.57       11,700.0       3,818.2       -637.4       3,870.4       0.00       0.00       0.00         16,400.0       90.00       359.57       11,700.0       3,918.2       -638.1       3,969.5       0.00       0.00       0.00         16,500.0       90.00       359.57       11,700.0       4,018.2       -638.9       4,068.5       0.00       0.00       0.00         16,600.0       90.00       359.57       11,700.0       4,118.2       <	15,600.0	90.00	359.57	11,700.0	3,118.2	-632.1	3,177.3	0.00	0.00	0.00
15,900.0       90.00       359.57       11,700.0       3,418.2       -634.4       3,474.4       0.00       0.00       0.01         16,000.0       90.00       359.57       11,700.0       3,518.2       -635.1       3,573.4       0.00       0.00       0.00         16,100.0       90.00       359.57       11,700.0       3,618.2       -635.9       3,672.4       0.00       0.00       0.00         16,200.0       90.00       359.57       11,700.0       3,718.2       -636.6       3,771.4       0.00       0.00       0.00         16,300.0       90.00       359.57       11,700.0       3,818.2       -637.4       3,870.4       0.00       0.00       0.00         16,400.0       90.00       359.57       11,700.0       3,918.2       -638.1       3,969.5       0.00       0.00       0.00         16,500.0       90.00       359.57       11,700.0       4,018.2       -638.9       4,068.5       0.00       0.00       0.00         16,600.0       90.00       359.57       11,700.0       4,118.2       -639.6       4,167.5       0.00       0.00       0.00	15,700.0	90.00	359.57	11,700.0	3,218.2	-632.9	3,276.4	0.00	0.00	0.00
16,000.0       90.00       359.57       11,700.0       3,518.2       -635.1       3,573.4       0.00       0.00       0.01         16,100.0       90.00       359.57       11,700.0       3,618.2       -635.9       3,672.4       0.00       0.00       0.00         16,200.0       90.00       359.57       11,700.0       3,718.2       -636.6       3,771.4       0.00       0.00       0.00         16,300.0       90.00       359.57       11,700.0       3,818.2       -637.4       3,870.4       0.00       0.00       0.00         16,400.0       90.00       359.57       11,700.0       3,918.2       -638.1       3,969.5       0.00       0.00       0.00         16,500.0       90.00       359.57       11,700.0       4,018.2       -638.9       4,068.5       0.00       0.00       0.00         16,600.0       90.00       359.57       11,700.0       4,118.2       -639.6       4,167.5       0.00       0.00       0.00	15,800.0	90.00	359.57	11,700.0	3,318.2	-633.6	3,375.4	0.00	0.00	0.00
16,100.0       90.00       359.57       11,700.0       3,618.2       -635.9       3,672.4       0.00       0.00       0.0         16,200.0       90.00       359.57       11,700.0       3,718.2       -636.6       3,771.4       0.00       0.00       0.0         16,300.0       90.00       359.57       11,700.0       3,818.2       -637.4       3,870.4       0.00       0.00       0.0         16,400.0       90.00       359.57       11,700.0       3,918.2       -638.1       3,969.5       0.00       0.00       0.0         16,500.0       90.00       359.57       11,700.0       4,018.2       -638.9       4,068.5       0.00       0.00       0.0         16,600.0       90.00       359.57       11,700.0       4,118.2       -639.6       4,167.5       0.00       0.00       0.0	15,900.0	90.00	359.57	11,700.0	3,418.2	-634.4	3,474.4	0.00	0.00	0.00
16,200.0       90.00       359.57       11,700.0       3,718.2       -636.6       3,771.4       0.00       0.00       0.0         16,300.0       90.00       359.57       11,700.0       3,818.2       -637.4       3,870.4       0.00       0.00       0.0         16,400.0       90.00       359.57       11,700.0       3,918.2       -638.1       3,969.5       0.00       0.00       0.0         16,500.0       90.00       359.57       11,700.0       4,018.2       -638.9       4,068.5       0.00       0.00       0.0         16,600.0       90.00       359.57       11,700.0       4,118.2       -639.6       4,167.5       0.00       0.00       0.0	16,000.0	90.00	359.57	11,700.0	3,518.2	-635.1	3,573.4	0.00	0.00	0.00
16,300.0       90.00       359.57       11,700.0       3,818.2       -637.4       3,870.4       0.00       0.00       0.0         16,400.0       90.00       359.57       11,700.0       3,918.2       -638.1       3,969.5       0.00       0.00       0.0         16,500.0       90.00       359.57       11,700.0       4,018.2       -638.9       4,068.5       0.00       0.00       0.0         16,600.0       90.00       359.57       11,700.0       4,118.2       -639.6       4,167.5       0.00       0.00       0.0	16,100.0	90.00	359.57	11,700.0	3,618.2	-635.9	3,672.4	0.00	0.00	0.00
16,400.0     90.00     359.57     11,700.0     3,918.2     -638.1     3,969.5     0.00     0.00     0.0       16,500.0     90.00     359.57     11,700.0     4,018.2     -638.9     4,068.5     0.00     0.00     0.0       16,600.0     90.00     359.57     11,700.0     4,118.2     -639.6     4,167.5     0.00     0.00     0.0	16,200.0	90.00	359.57	11,700.0	3,718.2	-636.6	3,771.4	0.00	0.00	0.00
16,500.0     90.00     359.57     11,700.0     4,018.2     -638.9     4,068.5     0.00     0.00     0.0       16,600.0     90.00     359.57     11,700.0     4,118.2     -639.6     4,167.5     0.00     0.00     0.0	16,300.0	90.00	359.57	11,700.0	3,818.2	-637.4	3,870.4	0.00	0.00	0.00
16,600.0 90.00 359.57 11,700.0 4,118.2 -639.6 4,167.5 0.00 0.00 0.0	16,400.0	90.00	359.57	11,700.0	3,918.2	-638.1	3,969.5	0.00	0.00	0.00
	16,500.0	90.00	359.57	11,700.0	4,018.2	-638.9	4,068.5	0.00	0.00	0.00
16,700.0 90.00 359.57 11,700.0 4,218.2 -640.4 4,266.5 0.00 0.00 0.0	16,600.0	90.00	359.57	11,700.0	4,118.2	-639.6	4,167.5	0.00	0.00	0.00
	16,700.0	90.00	359.57	11,700.0	4,218.2	-640.4	4,266.5	0.00	0.00	0.00
16,785.8 90.00 359.57 11,700.0 4,304.0 -641.0 4,351.5 0.00 0.00 0.0	16.785.8	90.00	359.57	11.700.0	4.304.0	-641.0	4.351.5	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(Grace 16 State Co - plan hits target cen - Point	0.00 ter	0.00	11,222.5	-826.0	-604.0	633,760.00	747,529.00	32.7404500°N	103.6627351°W
FTP(Grace 16 State Cor - plan hits target cen - Point	0.00 ter	0.00	11,435.2	-776.0	-604.0	633,810.00	747,529.00	32.7405874°N	103.6627341°W
PBHL(Grace 16 State Control of the plan hits target center - Point	0.00 ter	0.00	11,700.0	4,304.0	-641.0	638,890.00	747,492.00	32.7545504°N	103.6627498°W



### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

# NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description <u>Effective May 25, 2021</u>

I. Operator:EOG F	Resources Inc	OGRID	7377		Date	12/21/202	1
II. Type: ⊠ Original Other.							•
If Other, please describe:			·				
III. Well(s): Provide the be recompleted from a si					wells prop	osed to be dr	illed or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticip Gas MC		Anticipated Produced Water BBL/D
Grace 16 State Com 901H		P-16-18S-33E	870' FSL & 391' FEL	+/- 1000	+/- 3500	+/- 3	8000
V. Anticipated Schedu or proposed to be recomp	le: Provide the	following informatingle well pad or co	ion for each ne	ew or recompleted	well or sent.	, , , ,	-
Grace 16 State Com 901H		01/13/22	01/28/22	03/01/22		1/01/22	05/01/22
VI. Separation Equipm  VII. Operational Pract Subsection A through For the VIII. Best Management during active and planner	ices: ⊠ Attach of 19.15.27.8 N t Practices: ⊠	n a complete descrip NMAC.	ption of the ac	tions Operator wi	ll take to c	omply with	the requirements of

# Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

EFFECTIVE APRIL 1, 2022									
Beginning April 1, 2 reporting area must c			with its statewide natural ga	as captu	ure requirement for the applicable				
☐ Operator certifies capture requirement			tion because Operator is in o	complia	ance with its statewide natural ga				
IX. Anticipated Nat	tural Gas Producti	on:							
We	11	API	Anticipated Average Natural Gas Rate MCF/D	)	Anticipated Volume of Natural Gas for the First Year MCF				
X. Natural Gas Gat	thering System (NC	GGS):							
Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in					
production operation the segment or portion XII. Line Capacity. production volume from XIII. Line Pressure	s to the existing or pon of the natural gas.  The natural gas garom the well prior to the comparison of the comparison	planned interconnect of the gathering system(s) to whathering system  will to the date of first product does not anticipate the	he natural gas gathering systewhich the well(s) will be consisted will not have capacity to go tion.	em(s), a nected. gather 10 ted to th	ed pipeline route(s) connecting the and the maximum daily capacity of 00% of the anticipated natural gather same segment, or portion, of the ressure caused by the new well(s).				
☐ Attach Operator's	s plan to manage pro	oduction in response to the	he increased line pressure.						
Section 2 as provided	d in Paragraph (2) o		27.9 NMAC, and attaches a f		78 for the information provided in cription of the specific information				

(h) (i)

# Section 3 - Certifications Effective May 25, 2021

Operator certifies that, at	fter reasonable inquiry and based on the available information at the time of submittal:							
Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, aking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or								
hundred percent of the ar	Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one nundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking not account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following:							
Well Shut-In. ☐ Operate D of 19.15.27.9 NMAC;	or will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection or							
Venting and Flaring Pl	an.   Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential							
alternative beneficial use	s for the natural gas until a natural gas gathering system is available, including:							
(a)	power generation on lease;							
<b>(b)</b>	power generation for grid;							
(c)								
( <b>d</b> )	liquids removal on lease;							
(e)	reinjection for underground storage;							
( <b>f</b> )	reinjection for temporary storage;							
(g)	reinjection for enhanced oil recovery:							

# **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

fuel cell production; and

- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

### Natural Gas Management Plan Items VI-VIII

# VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Adequate separation relates to retention time for Liquid Liquid separation and velocity for Gas-Liquid separation.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering is selected to be serviced without flow interruptions or the need to release
  gas from the well.

# VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.

### **Drilling Operations**

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared, unless there is an equipment malfunction
  and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which
  point the gas will be vented.

### Completions/Recompletions Operations

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

#### **Production Operations**

- Weekly AVOs will be performed on all facilities.
- All flares will be equipped with auto-ignition systems and continuous pilot operations.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All plunger lift systems will be optimized to limit the amount of waste.
- All tanks will have automatic gauging equipment installed.
- Leaking thief hatches found during AVOs will be cleaned and properly re-sealed.

#### Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Weekly AVOs will be performed on all wells and facilities that produce more than 60 Mcfd.

### Measurement & Estimation

- All volume that is flared and vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- No meter bypasses with be installed.

• When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

# VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- During downhole well maintenance, EOG will use best management practices to vent as minimally as possible.
- Prior to the commencement of any maintenance, the tank or vessel will be isolated from the rest of the facilities.
- All valves upstream of the equipment will be closed and isolated.
- After equipment has been isolated, the equipment will be blown down to as low a pressure as possible into the collection system.
- If the equipment being maintained cannot be relieved into the collection system, it shall be released to a tank where the vapor can either be captured or combusted if possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.



# Grace 16 State Com Template #901H Lea County, New Mexico

Proposed Wellbore

Design A

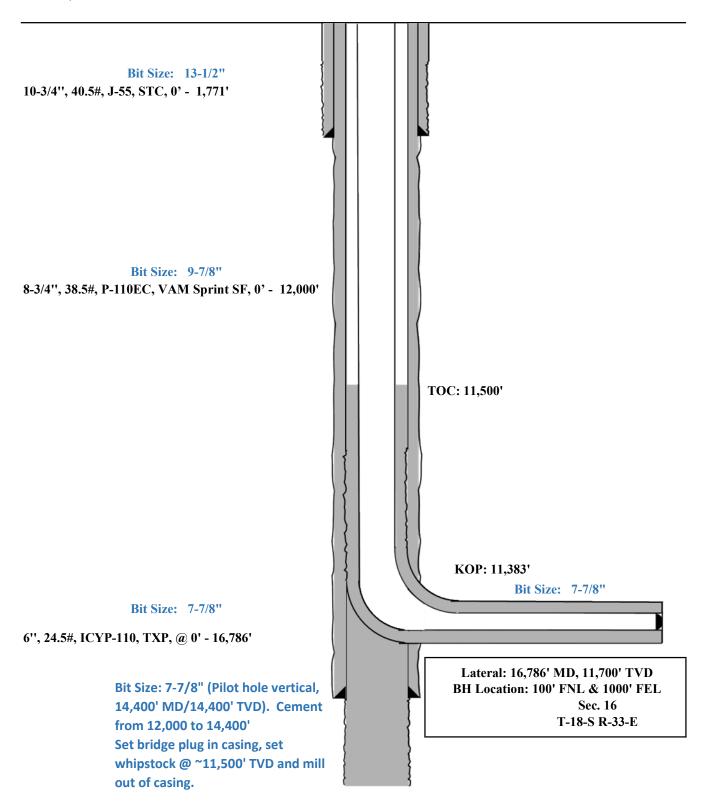
KB: 3894' GL: 3869'

391' FEL Section 16

870' FSL

T-18-S, R-33-E

API: 30-025-\*\*\*\*



Page 1 of 5



# **Grace 16 State Com Template #901H**

### **Permit Information:**

Well Name: Grace 16 State Com Template #901H

Location:

SHL: 870' FSL & 391' FEL, Section 16, T-18-S, R-33-E, Lea Co., N.M. BHL: 100' FNL & 1000' FEL, Section 16, T-18-S, R-33-E, Lea Co., N.M.

# **Design** A

**Casing Program:** 

Hole		Csg				DFmin	DFmin	Dfmin
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
13.5"	0' - 1,771'	10.75"	40.5#	J-55	STC	1.125	1.25	1.6
9.875"	0' - 12,000'	8.75"	38.5#	P-110EC	VAM Sprint SF	1.125	1.25	1.6
7.875"	0' - 16,786'	6"	24.5#	ICYP-110	TXP	1.125	1.25	1.6

**Cement Program:** 

Depth	No. Sacks	Wt.	Yld Ft3/sk	Slurry Description
1 7711	500	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)
1,771'	90	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
12 000!	860	14.2	1.11	1st Stage (Tail): Class C + 5% Salt (TOC @ 5,509')
12,000'	1080	14.8	1.5	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ surface)
14,400' 7-7/8" Pilot Hole	853	15.6	1.19	Plug: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond (TOC @ 4,789')
16,786'	800	14.2	1.31	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 11,500')

### **Mud Program:**

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,771'	Fresh - Gel	8.6-8.8	28-34	N/c
1,771' – 12,000'	Brine	10.0-10.2	28-34	N/c
12,000' – 11,383'	Oil Base	8.7-9.4	58-68	N/c - 6
11,383' – 16,786' Lateral	Oil Base	10.0-14.0	58-68	4 - 6
11,383' – 14,400' Pilot Hole	Oil Base	10.0-14.0	58-68	4 - 6



### Grace 16 State Com Template #901H

# **Hydrogen Sulfide Plan Summary**

- A. All personnel shall receive proper H2S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:
  - Well control equipment
  - a. Flare line 150' from wellhead to be ignited by flare gun.
  - b. Choke manifold with a remotely operated choke.
  - c. Mud/gas separator
  - Protective equipment for essential personnel.

Breathing apparatus:

- a. Rescue Packs (SCBA) 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escape packs —4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
- c. Emergency Escape Packs —4 packs shall be stored in the doghouse for emergency evacuation.

### Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher
- H2S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

- Visual warning systems.
  - a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  - b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
  - c. Two wind socks will be placed in strategic locations, visible from all angles.



### **Grace 16 State Com Template #901H**

### ■ Mud program:

The mud program has been designed to minimize the volume of H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.

# ■ Metallurgy:

All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

### ■ Communication:

Communication will be via cell phones and land lines where available.



# Grace 16 State Com Template #901H Emergency Assistance Telephone List

PUBLIC SAFETY	·:	•	911 or
Lea County Sheriff	's Department		(575) 396-3611
	Rod Coffman		
Fire Department:			
	Carlsbad		(575) 885-3125
	Artesia		(575) 746-5050
Hospitals:			
_	Carlsbad		(575) 887-4121
	Artesia		(575) 748-3333
	Hobbs		(575) 392-1979
Dept. of Public Safe	ety/Carlsbad		(575) 748-9718
Highway Departme			(575) 885-3281
New Mexico Oil Co			(575) 476-3440
U.S. Dept. of Labor	•		(575) 887-1174
-			•
<b>EOG Resources, I</b>	nc.		
EOG / Midland		Office	(432) 686-3600
<b>Company Drilling</b>	<b>Consultants:</b>		
David Dominque		Cell	(985) 518-5839
Mike Vann		Cell	(817) 980-5507
<b>Drilling Engineer</b>			
Esteban Del Valle		Cell	(432) 269-7063
Daniel Moose		Cell	(432) 312-2803
<b>Drilling Manager</b>			
Aj Dach		Office	(432) 686-3751
		Cell	(817) 480-1167
<b>Drilling Superinte</b>	ndent		
Jason Townsend		Office	(432) 848-9209
		Cell	(210) 776-5131
H&P Drilling			
H&P Drilling		Office	(432) 563-5757
H&P 651 Drilling F	Rig	Rig	(903) 509-7131
Tool Pusher:			
Johnathan Craig		Cell	(817) 760-6374
Brad Garrett			
Safety:			
Brian Chandler (HS	E Manager)	Office	(432) 686-3695
		Cell	(817) 239-0251