

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources
OIL CONSERVATION DIVISION
1220 South St. Francis
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-44464
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. 313956
7. Lease Name or Unit Agreement Name NEPTUNE 10 STATE COM
8. Well Number 102H
9. OGRID Number 7377
10. Pool name or Wildcat [98135] WC-025 G-09 S243310P; UPPER WOLFCAMP

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	
2. Name of Operator EOG Resources	
3. Address of Operator PO BOX 2267, MIDLAND, TX 79702	
4. Well Location Unit Letter <u>O</u> : <u>120874</u> feet from the <u>SOUTH</u> line and <u>2202 1690</u> feet from the <u>EAST</u> line Section <u>10</u> Township <u>24S</u> Range <u>33E</u> NMPM County <u>LEA</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3613 GL	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐	APD CHANGES ☒	OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

EOG respectfully requests an amendment to our approved APD for this well to reflect the following changes:

Well number change to 102H
Target formation change from Wolfcamp to Leonard Shale
Casing and cement changes to reflect shallower target
SHL change to Sec 10 T-24-S R-33-E 130 ft FSL 2202 ft FEL Lea Co, NM
BHL change to Sec 3 T-24-S R-33-E 100 ft FNL 2393 ft FEL Lea Co, NM

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [Signature] TITLE Sr. Regulatory Administrator DATE 01/16/2020

Type or print name Emily Follis E-mail address: emily_follis@eog.com PHONE: 432-848-9163

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 01/30/2020
Conditions of Approval (if any):

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
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1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☒ AMENDED REPORT

HOBBS OCD

JAN 21 2020

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-025-44464	98135	WC-025-G-09-S243310P-UPPER WOLFCAMP
313956	NEPTUNE 10 STATE COM	102H
7377	EOG RESOURCES, INC.	3813'

¹⁰Surface Location

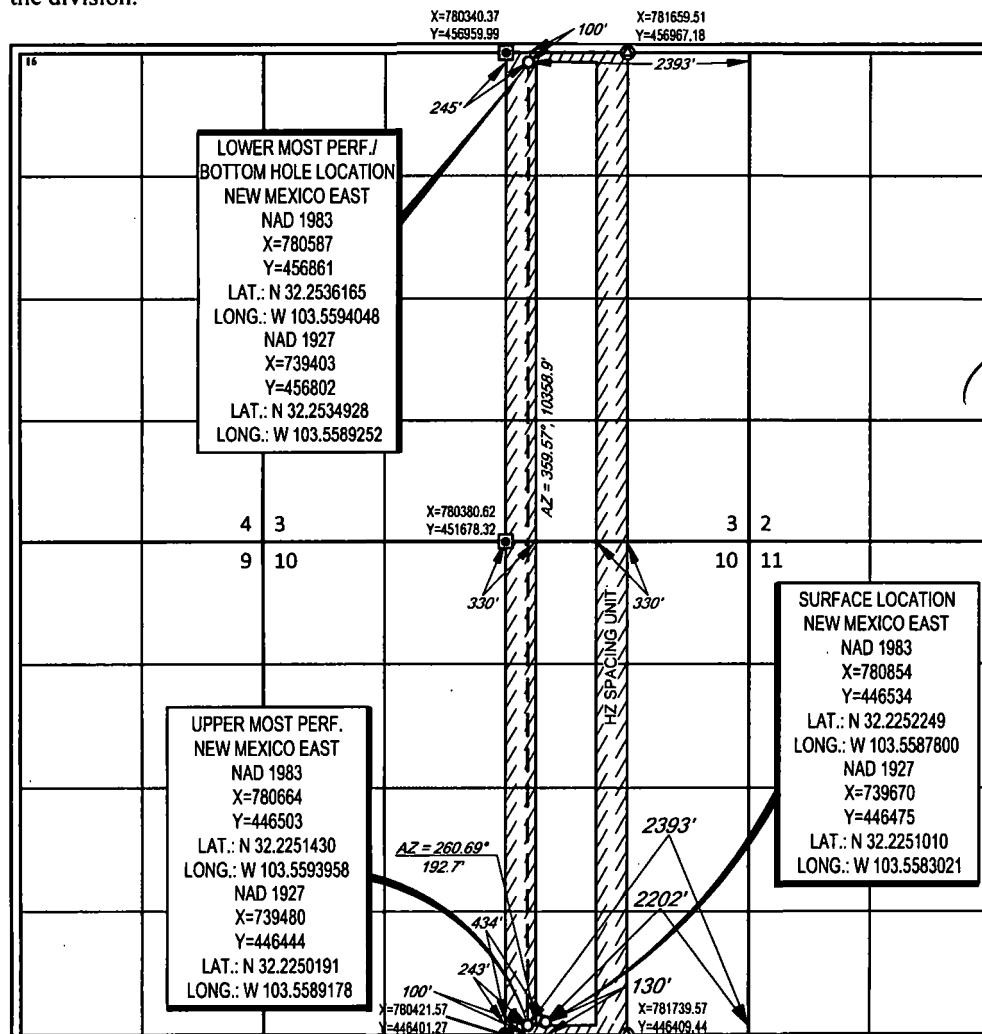
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	10	24-S	33-E	-	130'	SOUTH	2202'	EAST	LEA

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	3	24-S	33-E	-	100'	NORTH	2393'	EAST	LEA

¹² Dedicated Acres 320.08	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.



¹⁷OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Emily Follis* Date: 01/16/2020

Printed Name: Emily Follis

E-mail Address: emily_follis@eogresources.com

¹⁸SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

11/20/2019

Date of Survey: 11/20/2019
Signature: *Ramon A. Dominguez*

Certificate Number: 24508

EOG RESOURCES, INC.
NEPTUNE 10 STATE COM #102H

Revised Permit Information 1/6/2020:

Well Name: Neptune 10 State Com #102H

Location:

SHL: 130' FSL & 2202' FEL, Section 10, T-24-S, R-33-E, Lea Co., N.M.

BHL: 100' FNL & 2393' FEL, Section 3, T-24-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0' – 1,340'	13.375"	54.5#	J-55	STC	1.125	1.25	1.60
12.25"	0' – 4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
12.25"	4000' – 5200'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0' – 9,970'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60
8.5"	9,970' – 19,901'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
1,340'	830	13.5	1.73	Lead: Class C + 4.0% Bentonite + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	160	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,200'	520	9.0	3.5	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)
	360	14.4	1.20	Tail: Class C + 10% NaCl + 3% MagOx
19,901'	470	11.0	3.21	Lead: Class C + 3% CaCl ₂ + 3% Microbond (TOC @ 4,700')
	2,820	14.4	1.2	Tail: Class H + 0.4% Halad-344 + 0.35% HR-601 + 3% Microbond

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' – 1,340'	Fresh - Gel	8.6-8.8	28-34	N/c
1,340' – 5,200'	Brine	10.0-10.2	28-34	N/c
5,200' – 9,220'	Cut Brine	8.4-9.0	28-34	N/c
9,220' – 19,901' Lateral	Oil Base	9.0-9.5	40-42	8-10

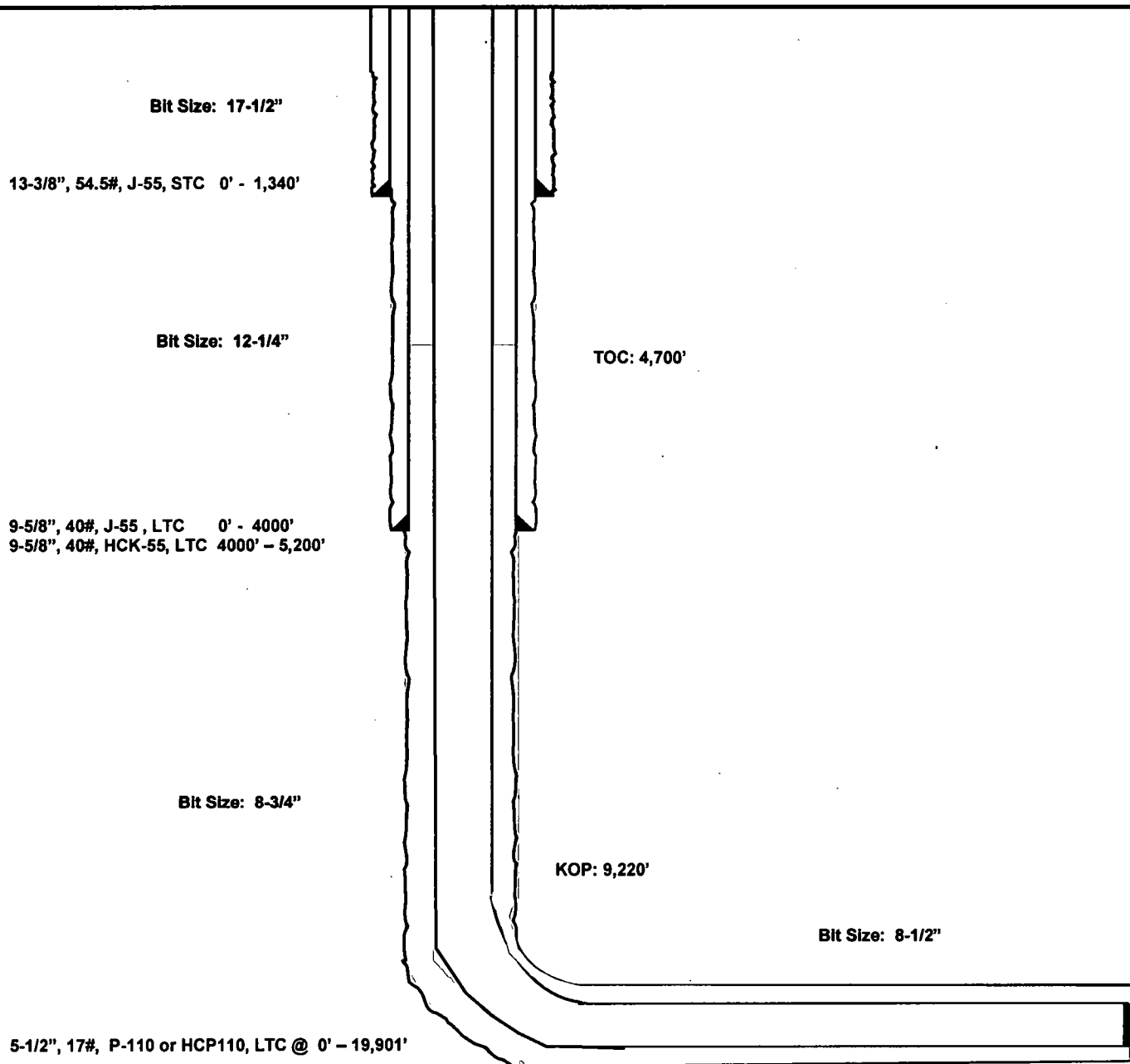
Neptune 10 State Com #102H
Lea County, New Mexico

Revised Wellbore 1/6/2020

130' FSL
2202' FEL
Section 10
T-24-S, R-33-E

API: 30-025-44464

KB: 3,638'
GL: 3,613'



Lateral: 19,901' MD, 9,694' TVD
BH Location: 100' FNL & 2393' FEL
Section 3
T-24-S, R-33-E



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Neptune 10 State Com

#102H

OH

Plan: Plan #0.1

Standard Planning Report

16 January, 2020

HOBBS OCD
JAN 21 2020
RECEIVED

Database:	EDM	Local Co-ordinate Reference:	Well #102H
Company:	EOG Resources - Midland	TVD Reference:	KB 25 @ 3638.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB 25 @ 3638.0usft
Site:	Neptune 10 State Com	North Reference:	Grid
Well:	#102H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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

Site	Neptune 10 State Com				
Site Position:		Northing:	446,557.00 usft	Latitude:	32° 13' 31.172 N
From:	Map	Easting:	778,964.00 usft	Longitude:	103° 33' 53.609 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	#102H					
Well Position	+N/-S	-23.0 usft	Northing:	446,534.00 usft	Latitude:	32° 13' 30.810 N
	+E/-W	1,890.0 usft	Easting:	780,854.00 usft	Longitude:	103° 33' 31.610 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,613.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/6/2020	6.67	60.03	47,676.02625583

Design	Plan #0.1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	358.52

Plan Survey Tool Program	Date 1/16/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,900.8 Plan #0.1 (OH)	EOG MWD+IFR1 MWD + IFR1	

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,597.2	1.94	246.91	1,597.2	-0.6	-1.5	2.00	2.00	0.00	246.91	
7,589.3	1.94	246.91	7,585.8	-80.4	-188.5	0.00	0.00	0.00	0.00	
7,686.5	0.00	0.00	7,683.0	-81.0	-190.0	2.00	-2.00	0.00	180.00	
9,220.0	0.00	0.00	9,216.5	-81.0	-190.0	0.00	0.00	0.00	0.00	KOP (Neptune 10 St
9,970.0	90.00	359.58	9,694.0	396.5	-193.5	12.00	12.00	-0.06	359.58	
19,900.8	90.00	359.58	9,694.0	10,327.0	-267.0	0.00	0.00	0.00	0.00	PBHL (Neptune 10 St



Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #102H
Company:	EOG Resources - Midland	TVD Reference:	KB 25 @ 3638.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB 25 @ 3638.0usft
Site:	Neptune 10 State Com	North Reference:	Grid
Well:	#102H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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
1,597.2	1.94	246.91	1,597.2	-0.6	-1.5	-0.6	2.00	2.00	0.00
1,600.0	1.94	246.91	1,600.0	-0.7	-1.6	-0.6	0.00	0.00	0.00
1,700.0	1.94	246.91	1,699.9	-2.0	-4.7	-1.9	0.00	0.00	0.00
1,800.0	1.94	246.91	1,799.9	-3.3	-7.8	-3.1	0.00	0.00	0.00
1,900.0	1.94	246.91	1,899.8	-4.7	-11.0	-4.4	0.00	0.00	0.00
2,000.0	1.94	246.91	1,999.7	-6.0	-14.1	-5.6	0.00	0.00	0.00
2,100.0	1.94	246.91	2,099.7	-7.3	-17.2	-6.9	0.00	0.00	0.00
2,200.0	1.94	246.91	2,199.6	-8.7	-20.3	-8.1	0.00	0.00	0.00
2,300.0	1.94	246.91	2,299.6	-10.0	-23.4	-9.4	0.00	0.00	0.00
2,400.0	1.94	246.91	2,399.5	-11.3	-26.6	-10.6	0.00	0.00	0.00
2,500.0	1.94	246.91	2,499.5	-12.7	-29.7	-11.9	0.00	0.00	0.00
2,600.0	1.94	246.91	2,599.4	-14.0	-32.8	-13.1	0.00	0.00	0.00
2,700.0	1.94	246.91	2,699.3	-15.3	-35.9	-14.4	0.00	0.00	0.00
2,800.0	1.94	246.91	2,799.3	-16.6	-39.0	-15.6	0.00	0.00	0.00
2,900.0	1.94	246.91	2,899.2	-18.0	-42.2	-16.9	0.00	0.00	0.00
3,000.0	1.94	246.91	2,999.2	-19.3	-45.3	-18.1	0.00	0.00	0.00
3,100.0	1.94	246.91	3,099.1	-20.6	-48.4	-19.4	0.00	0.00	0.00
3,200.0	1.94	246.91	3,199.1	-22.0	-51.5	-20.6	0.00	0.00	0.00
3,300.0	1.94	246.91	3,299.0	-23.3	-54.6	-21.9	0.00	0.00	0.00
3,400.0	1.94	246.91	3,398.9	-24.6	-57.8	-23.1	0.00	0.00	0.00
3,500.0	1.94	246.91	3,498.9	-26.0	-60.9	-24.4	0.00	0.00	0.00
3,600.0	1.94	246.91	3,598.8	-27.3	-64.0	-25.6	0.00	0.00	0.00
3,700.0	1.94	246.91	3,698.8	-28.6	-67.1	-26.9	0.00	0.00	0.00
3,800.0	1.94	246.91	3,798.7	-29.9	-70.2	-28.1	0.00	0.00	0.00
3,900.0	1.94	246.91	3,898.7	-31.3	-73.4	-29.4	0.00	0.00	0.00
4,000.0	1.94	246.91	3,998.6	-32.6	-76.5	-30.6	0.00	0.00	0.00
4,100.0	1.94	246.91	4,098.5	-33.9	-79.6	-31.9	0.00	0.00	0.00
4,200.0	1.94	246.91	4,198.5	-35.3	-82.7	-33.1	0.00	0.00	0.00
4,300.0	1.94	246.91	4,298.4	-36.6	-85.9	-34.4	0.00	0.00	0.00
4,400.0	1.94	246.91	4,398.4	-37.9	-89.0	-35.6	0.00	0.00	0.00
4,500.0	1.94	246.91	4,498.3	-39.3	-92.1	-36.9	0.00	0.00	0.00
4,600.0	1.94	246.91	4,598.3	-40.6	-95.2	-38.1	0.00	0.00	0.00
4,700.0	1.94	246.91	4,698.2	-41.9	-98.3	-39.4	0.00	0.00	0.00
4,800.0	1.94	246.91	4,798.1	-43.3	-101.5	-40.6	0.00	0.00	0.00
4,900.0	1.94	246.91	4,898.1	-44.6	-104.6	-41.9	0.00	0.00	0.00
5,000.0	1.94	246.91	4,998.0	-45.9	-107.7	-43.1	0.00	0.00	0.00
5,100.0	1.94	246.91	5,098.0	-47.2	-110.8	-44.4	0.00	0.00	0.00
5,200.0	1.94	246.91	5,197.9	-48.6	-113.9	-45.6	0.00	0.00	0.00



Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #102H
Company:	EOG Resources - Midland	TVD Reference:	KB 25 @ 3638.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB 25 @ 3638.0usft
Site:	Neptune 10 State Com	North Reference:	Grid
Well:	#102H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	1.94	246.91	5,297.9	-49.9	-117.1	-46.9	0.00	0.00	0.00
5,400.0	1.94	246.91	5,397.8	-51.2	-120.2	-48.1	0.00	0.00	0.00
5,500.0	1.94	246.91	5,497.7	-52.6	-123.3	-49.4	0.00	0.00	0.00
5,600.0	1.94	246.91	5,597.7	-53.9	-126.4	-50.6	0.00	0.00	0.00
5,700.0	1.94	246.91	5,697.6	-55.2	-129.5	-51.9	0.00	0.00	0.00
5,800.0	1.94	246.91	5,797.6	-56.6	-132.7	-53.1	0.00	0.00	0.00
5,900.0	1.94	246.91	5,897.5	-57.9	-135.8	-54.4	0.00	0.00	0.00
6,000.0	1.94	246.91	5,997.4	-59.2	-138.9	-55.6	0.00	0.00	0.00
6,100.0	1.94	246.91	6,097.4	-60.5	-142.0	-56.9	0.00	0.00	0.00
6,200.0	1.94	246.91	6,197.3	-61.9	-145.1	-58.1	0.00	0.00	0.00
6,300.0	1.94	246.91	6,297.3	-63.2	-148.3	-59.4	0.00	0.00	0.00
6,400.0	1.94	246.91	6,397.2	-64.5	-151.4	-60.6	0.00	0.00	0.00
6,500.0	1.94	246.91	6,497.2	-65.9	-154.5	-61.8	0.00	0.00	0.00
6,600.0	1.94	246.91	6,597.1	-67.2	-157.6	-63.1	0.00	0.00	0.00
6,700.0	1.94	246.91	6,697.0	-68.5	-160.7	-64.3	0.00	0.00	0.00
6,800.0	1.94	246.91	6,797.0	-69.9	-163.9	-65.6	0.00	0.00	0.00
6,900.0	1.94	246.91	6,896.9	-71.2	-167.0	-66.8	0.00	0.00	0.00
7,000.0	1.94	246.91	6,996.9	-72.5	-170.1	-68.1	0.00	0.00	0.00
7,100.0	1.94	246.91	7,096.8	-73.8	-173.2	-69.3	0.00	0.00	0.00
7,200.0	1.94	246.91	7,196.8	-75.2	-176.3	-70.6	0.00	0.00	0.00
7,300.0	1.94	246.91	7,296.7	-76.5	-179.5	-71.8	0.00	0.00	0.00
7,400.0	1.94	246.91	7,396.6	-77.8	-182.6	-73.1	0.00	0.00	0.00
7,500.0	1.94	246.91	7,496.6	-79.2	-185.7	-74.3	0.00	0.00	0.00
7,589.3	1.94	246.91	7,585.8	-80.4	-188.5	-75.5	0.00	0.00	0.00
7,600.0	1.73	246.91	7,596.5	-80.5	-188.8	-75.6	2.00	-2.00	0.00
7,686.5	0.00	0.00	7,683.0	-81.0	-190.0	-76.1	2.00	-2.00	0.00
7,700.0	0.00	0.00	7,696.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
7,800.0	0.00	0.00	7,796.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
7,900.0	0.00	0.00	7,896.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,000.0	0.00	0.00	7,996.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,100.0	0.00	0.00	8,096.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,200.0	0.00	0.00	8,196.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,300.0	0.00	0.00	8,296.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,400.0	0.00	0.00	8,396.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,500.0	0.00	0.00	8,496.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,600.0	0.00	0.00	8,596.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,700.0	0.00	0.00	8,696.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,800.0	0.00	0.00	8,796.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
8,900.0	0.00	0.00	8,896.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
9,000.0	0.00	0.00	8,996.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
9,100.0	0.00	0.00	9,096.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
9,200.0	0.00	0.00	9,196.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
9,220.0	0.00	0.00	9,216.5	-81.0	-190.0	-76.1	0.00	0.00	0.00
9,225.0	0.60	359.58	9,221.5	-81.0	-190.0	-76.0	12.00	12.00	0.00
9,250.0	3.60	359.58	9,246.5	-80.1	-190.0	-75.1	12.00	12.00	0.00
9,275.0	6.60	359.58	9,271.4	-77.8	-190.0	-72.9	12.00	12.00	0.00
9,300.0	9.60	359.58	9,296.1	-74.3	-190.0	-69.4	12.00	12.00	0.00
9,325.0	12.60	359.58	9,320.7	-69.5	-190.1	-64.6	12.00	12.00	0.00
9,350.0	15.60	359.58	9,344.9	-63.4	-190.1	-58.5	12.00	12.00	0.00
9,375.0	18.60	359.58	9,368.8	-56.1	-190.2	-51.1	12.00	12.00	0.00
9,400.0	21.60	359.58	9,392.3	-47.5	-190.2	-42.5	12.00	12.00	0.00
9,425.0	24.60	359.58	9,415.3	-37.7	-190.3	-32.7	12.00	12.00	0.00
9,450.0	27.60	359.58	9,437.7	-26.7	-190.4	-21.7	12.00	12.00	0.00
9,475.0	30.60	359.58	9,459.6	-14.5	-190.5	-9.6	12.00	12.00	0.00



Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #102H
Company:	EOG Resources - Midland	TVD Reference:	KB 25 @ 3638.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB 25 @ 3638.0usft
Site:	Neptune 10 State Com	North Reference:	Grid
Well:	#102H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)
9,500.0	33.60	359.58	9,480.7	-1.2	-190.6	3.7	12.00	12.00	0.00
9,525.0	36.60	359.58	9,501.2	13.2	-190.7	18.1	12.00	12.00	0.00
9,550.0	39.60	359.58	9,520.9	28.6	-190.8	33.5	12.00	12.00	0.00
9,575.0	42.60	359.58	9,539.7	45.0	-190.9	49.9	12.00	12.00	0.00
9,600.0	45.60	359.58	9,557.6	62.4	-191.1	67.3	12.00	12.00	0.00
9,625.0	48.60	359.58	9,574.7	80.7	-191.2	85.6	12.00	12.00	0.00
9,650.0	51.60	359.58	9,590.7	99.9	-191.3	104.8	12.00	12.00	0.00
9,675.0	54.60	359.58	9,605.7	119.9	-191.5	124.8	12.00	12.00	0.00
9,700.0	57.60	359.58	9,619.6	140.6	-191.6	145.5	12.00	12.00	0.00
9,725.0	60.60	359.58	9,632.5	162.1	-191.8	167.0	12.00	12.00	0.00
9,750.0	63.60	359.58	9,644.2	184.2	-192.0	189.1	12.00	12.00	0.00
9,775.0	66.60	359.58	9,654.7	206.8	-192.1	211.7	12.00	12.00	0.00
9,800.0	69.60	359.58	9,664.0	230.0	-192.3	234.9	12.00	12.00	0.00
9,825.0	72.60	359.58	9,672.1	253.7	-192.5	258.6	12.00	12.00	0.00
9,850.0	75.60	359.58	9,679.0	277.7	-192.7	282.6	12.00	12.00	0.00
9,875.0	78.60	359.58	9,684.5	302.1	-192.8	307.0	12.00	12.00	0.00
9,900.0	81.60	359.58	9,688.8	326.7	-193.0	331.6	12.00	12.00	0.00
9,925.0	84.60	359.58	9,691.8	351.5	-193.2	356.4	12.00	12.00	0.00
9,950.0	87.60	359.58	9,693.5	376.5	-193.4	381.3	12.00	12.00	0.00
9,970.0	90.00	359.58	9,694.0	396.5	-193.5	401.3	12.00	12.00	0.00
10,000.0	90.00	359.58	9,694.0	426.5	-193.8	431.3	0.00	0.00	0.00
10,100.0	90.00	359.58	9,694.0	526.5	-194.5	531.3	0.00	0.00	0.00
10,200.0	90.00	359.58	9,694.0	626.5	-195.2	631.3	0.00	0.00	0.00
10,300.0	90.00	359.58	9,694.0	726.5	-196.0	731.3	0.00	0.00	0.00
10,400.0	90.00	359.58	9,694.0	826.5	-196.7	831.3	0.00	0.00	0.00
10,500.0	90.00	359.58	9,694.0	926.5	-197.5	931.2	0.00	0.00	0.00
10,600.0	90.00	359.58	9,694.0	1,026.4	-198.2	1,031.2	0.00	0.00	0.00
10,700.0	90.00	359.58	9,694.0	1,126.4	-198.9	1,131.2	0.00	0.00	0.00
10,800.0	90.00	359.58	9,694.0	1,226.4	-199.7	1,231.2	0.00	0.00	0.00
10,900.0	90.00	359.58	9,694.0	1,326.4	-200.4	1,331.2	0.00	0.00	0.00
11,000.0	90.00	359.58	9,694.0	1,426.4	-201.2	1,431.2	0.00	0.00	0.00
11,100.0	90.00	359.58	9,694.0	1,526.4	-201.9	1,531.1	0.00	0.00	0.00
11,200.0	90.00	359.58	9,694.0	1,626.4	-202.6	1,631.1	0.00	0.00	0.00
11,300.0	90.00	359.58	9,694.0	1,726.4	-203.4	1,731.1	0.00	0.00	0.00
11,400.0	90.00	359.58	9,694.0	1,826.4	-204.1	1,831.1	0.00	0.00	0.00
11,500.0	90.00	359.58	9,694.0	1,926.4	-204.9	1,931.1	0.00	0.00	0.00
11,600.0	90.00	359.58	9,694.0	2,026.4	-205.6	2,031.1	0.00	0.00	0.00
11,700.0	90.00	359.58	9,694.0	2,126.4	-206.3	2,131.0	0.00	0.00	0.00
11,800.0	90.00	359.58	9,694.0	2,226.4	-207.1	2,231.0	0.00	0.00	0.00
11,900.0	90.00	359.58	9,694.0	2,326.4	-207.8	2,331.0	0.00	0.00	0.00
12,000.0	90.00	359.58	9,694.0	2,426.4	-208.6	2,431.0	0.00	0.00	0.00
12,100.0	90.00	359.58	9,694.0	2,526.4	-209.3	2,531.0	0.00	0.00	0.00
12,200.0	90.00	359.58	9,694.0	2,626.4	-210.0	2,631.0	0.00	0.00	0.00
12,300.0	90.00	359.58	9,694.0	2,726.4	-210.8	2,730.9	0.00	0.00	0.00
12,400.0	90.00	359.58	9,694.0	2,826.4	-211.5	2,830.9	0.00	0.00	0.00
12,500.0	90.00	359.58	9,694.0	2,926.4	-212.2	2,930.9	0.00	0.00	0.00
12,600.0	90.00	359.58	9,694.0	3,026.4	-213.0	3,030.9	0.00	0.00	0.00
12,700.0	90.00	359.58	9,694.0	3,126.4	-213.7	3,130.9	0.00	0.00	0.00
12,800.0	90.00	359.58	9,694.0	3,226.4	-214.5	3,230.9	0.00	0.00	0.00
12,900.0	90.00	359.58	9,694.0	3,326.4	-215.2	3,330.8	0.00	0.00	0.00
13,000.0	90.00	359.58	9,694.0	3,426.4	-215.9	3,430.8	0.00	0.00	0.00
13,100.0	90.00	359.58	9,694.0	3,526.4	-216.7	3,530.8	0.00	0.00	0.00
13,200.0	90.00	359.58	9,694.0	3,626.4	-217.4	3,630.8	0.00	0.00	0.00
13,300.0	90.00	359.58	9,694.0	3,726.4	-218.2	3,730.8	0.00	0.00	0.00



Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well #102H
Company:	EOG Resources - Midland	TVD Reference:	KB 25 @ 3638.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB 25 @ 3638.0usft
Site:	Neptune 10 State Com	North Reference:	Grid
Well:	#102H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)
13,400.0	90.00	359.58	9,694.0	3,826.4	-218.9	3,830.8	0.00	0.00	0.00
13,500.0	90.00	359.58	9,694.0	3,926.4	-219.6	3,930.7	0.00	0.00	0.00
13,600.0	90.00	359.58	9,694.0	4,026.4	-220.4	4,030.7	0.00	0.00	0.00
13,700.0	90.00	359.58	9,694.0	4,126.4	-221.1	4,130.7	0.00	0.00	0.00
13,800.0	90.00	359.58	9,694.0	4,226.4	-221.9	4,230.7	0.00	0.00	0.00
13,900.0	90.00	359.58	9,694.0	4,326.4	-222.6	4,330.7	0.00	0.00	0.00
14,000.0	90.00	359.58	9,694.0	4,426.4	-223.3	4,430.7	0.00	0.00	0.00
14,100.0	90.00	359.58	9,694.0	4,526.4	-224.1	4,530.6	0.00	0.00	0.00
14,200.0	90.00	359.58	9,694.0	4,626.4	-224.8	4,630.6	0.00	0.00	0.00
14,300.0	90.00	359.58	9,694.0	4,726.3	-225.6	4,730.6	0.00	0.00	0.00
14,400.0	90.00	359.58	9,694.0	4,826.3	-226.3	4,830.6	0.00	0.00	0.00
14,500.0	90.00	359.58	9,694.0	4,926.3	-227.0	4,930.6	0.00	0.00	0.00
14,600.0	90.00	359.58	9,694.0	5,026.3	-227.8	5,030.5	0.00	0.00	0.00
14,700.0	90.00	359.58	9,694.0	5,126.3	-228.5	5,130.5	0.00	0.00	0.00
14,800.0	90.00	359.58	9,694.0	5,226.3	-229.3	5,230.5	0.00	0.00	0.00
14,900.0	90.00	359.58	9,694.0	5,326.3	-230.0	5,330.5	0.00	0.00	0.00
15,000.0	90.00	359.58	9,694.0	5,426.3	-230.7	5,430.5	0.00	0.00	0.00
15,100.0	90.00	359.58	9,694.0	5,526.3	-231.5	5,530.5	0.00	0.00	0.00
15,200.0	90.00	359.58	9,694.0	5,626.3	-232.2	5,630.4	0.00	0.00	0.00
15,300.0	90.00	359.58	9,694.0	5,726.3	-233.0	5,730.4	0.00	0.00	0.00
15,400.0	90.00	359.58	9,694.0	5,826.3	-233.7	5,830.4	0.00	0.00	0.00
15,500.0	90.00	359.58	9,694.0	5,926.3	-234.4	5,930.4	0.00	0.00	0.00
15,600.0	90.00	359.58	9,694.0	6,026.3	-235.2	6,030.4	0.00	0.00	0.00
15,700.0	90.00	359.58	9,694.0	6,126.3	-235.9	6,130.4	0.00	0.00	0.00
15,800.0	90.00	359.58	9,694.0	6,226.3	-236.7	6,230.3	0.00	0.00	0.00
15,900.0	90.00	359.58	9,694.0	6,326.3	-237.4	6,330.3	0.00	0.00	0.00
16,000.0	90.00	359.58	9,694.0	6,426.3	-238.1	6,430.3	0.00	0.00	0.00
16,100.0	90.00	359.58	9,694.0	6,526.3	-238.9	6,530.3	0.00	0.00	0.00
16,200.0	90.00	359.58	9,694.0	6,626.3	-239.6	6,630.3	0.00	0.00	0.00
16,300.0	90.00	359.58	9,694.0	6,726.3	-240.4	6,730.3	0.00	0.00	0.00
16,400.0	90.00	359.58	9,694.0	6,826.3	-241.1	6,830.2	0.00	0.00	0.00
16,500.0	90.00	359.58	9,694.0	6,926.3	-241.8	6,930.2	0.00	0.00	0.00
16,600.0	90.00	359.58	9,694.0	7,026.3	-242.6	7,030.2	0.00	0.00	0.00
16,700.0	90.00	359.58	9,694.0	7,126.3	-243.3	7,130.2	0.00	0.00	0.00
16,800.0	90.00	359.58	9,694.0	7,226.3	-244.1	7,230.2	0.00	0.00	0.00
16,900.0	90.00	359.58	9,694.0	7,326.3	-244.8	7,330.2	0.00	0.00	0.00
17,000.0	90.00	359.58	9,694.0	7,426.3	-245.5	7,430.1	0.00	0.00	0.00
17,100.0	90.00	359.58	9,694.0	7,526.3	-246.3	7,530.1	0.00	0.00	0.00
17,200.0	90.00	359.58	9,694.0	7,626.3	-247.0	7,630.1	0.00	0.00	0.00
17,300.0	90.00	359.58	9,694.0	7,726.3	-247.8	7,730.1	0.00	0.00	0.00
17,400.0	90.00	359.58	9,694.0	7,826.3	-248.5	7,830.1	0.00	0.00	0.00
17,500.0	90.00	359.58	9,694.0	7,926.3	-249.2	7,930.1	0.00	0.00	0.00
17,600.0	90.00	359.58	9,694.0	8,026.3	-250.0	8,030.0	0.00	0.00	0.00
17,700.0	90.00	359.58	9,694.0	8,126.3	-250.7	8,130.0	0.00	0.00	0.00
17,800.0	90.00	359.58	9,694.0	8,226.3	-251.5	8,230.0	0.00	0.00	0.00
17,900.0	90.00	359.58	9,694.0	8,326.2	-252.2	8,330.0	0.00	0.00	0.00
18,000.0	90.00	359.58	9,694.0	8,426.2	-252.9	8,430.0	0.00	0.00	0.00
18,100.0	90.00	359.58	9,694.0	8,526.2	-253.7	8,530.0	0.00	0.00	0.00
18,200.0	90.00	359.58	9,694.0	8,626.2	-254.4	8,629.9	0.00	0.00	0.00
18,300.0	90.00	359.58	9,694.0	8,726.2	-255.2	8,729.9	0.00	0.00	0.00
18,400.0	90.00	359.58	9,694.0	8,826.2	-255.9	8,829.9	0.00	0.00	0.00
18,500.0	90.00	359.58	9,694.0	8,926.2	-256.6	8,929.9	0.00	0.00	0.00
18,600.0	90.00	359.58	9,694.0	9,026.2	-257.4	9,029.9	0.00	0.00	0.00
18,700.0	90.00	359.58	9,694.0	9,126.2	-258.1	9,129.8	0.00	0.00	0.00



Planning Report

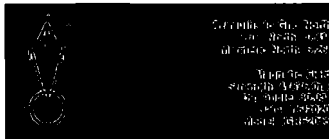
Database:	EDM	Local Co-ordinate Reference:	Well #102H
Company:	EOG Resources - Midland	TVD Reference:	KB 25 @ 3638.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB 25 @ 3638.0usft
Site:	Neptune 10 State Com	North Reference:	Grid
Well:	#102H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)
18,800.0	90.00	359.58	9,694.0	9,226.2	-258.9	9,229.8	0.00	0.00	0.00
18,900.0	90.00	359.58	9,694.0	9,326.2	-259.6	9,329.8	0.00	0.00	0.00
19,000.0	90.00	359.58	9,694.0	9,426.2	-260.3	9,429.8	0.00	0.00	0.00
19,100.0	90.00	359.58	9,694.0	9,526.2	-261.1	9,529.8	0.00	0.00	0.00
19,200.0	90.00	359.58	9,694.0	9,626.2	-261.8	9,629.8	0.00	0.00	0.00
19,300.0	90.00	359.58	9,694.0	9,726.2	-262.6	9,729.7	0.00	0.00	0.00
19,400.0	90.00	359.58	9,694.0	9,826.2	-263.3	9,829.7	0.00	0.00	0.00
19,500.0	90.00	359.58	9,694.0	9,926.2	-264.0	9,929.7	0.00	0.00	0.00
19,600.0	90.00	359.58	9,694.0	10,026.2	-264.8	10,029.7	0.00	0.00	0.00
19,700.0	90.00	359.58	9,694.0	10,126.2	-265.5	10,129.7	0.00	0.00	0.00
19,800.0	90.00	359.58	9,694.0	10,226.2	-266.3	10,229.7	0.00	0.00	0.00
19,900.8	90.00	359.58	9,694.0	10,327.0	-267.0	10,330.5	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 (Neptune 10 St Cor) - plan hits target center - Point	0.00	0.00	9,216.5	-81.0	-190.0	446,453.00	780,664.00	32° 13' 30.022 N	103° 33' 33.829 W
FTP (Neptune 10 St Cor) - plan misses target center by 163.5usft at 9624.4usft MD (9574.3 TVD, 80.3 N, -191.2 E) - Point	0.00	0.00	9,694.0	-31.0	-190.0	446,503.00	780,664.00	32° 13' 30.517 N	103° 33' 33.825 W
PBHL (Neptune 10 St Cor) - plan hits target center - Point	0.00	0.00	9,694.0	10,327.0	-267.0	456,861.00	780,587.00	32° 15' 13.016 N	103° 33' 33.852 W



To convert a Magnetic Direction to a Grid Direction, Add 6.29°
To convert a Magnetic Direction to a True Direction, Add 6.87° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

Lea County, NM (NAD 83 NME)
Neptune 10 State Com #102H
Plan #0.1

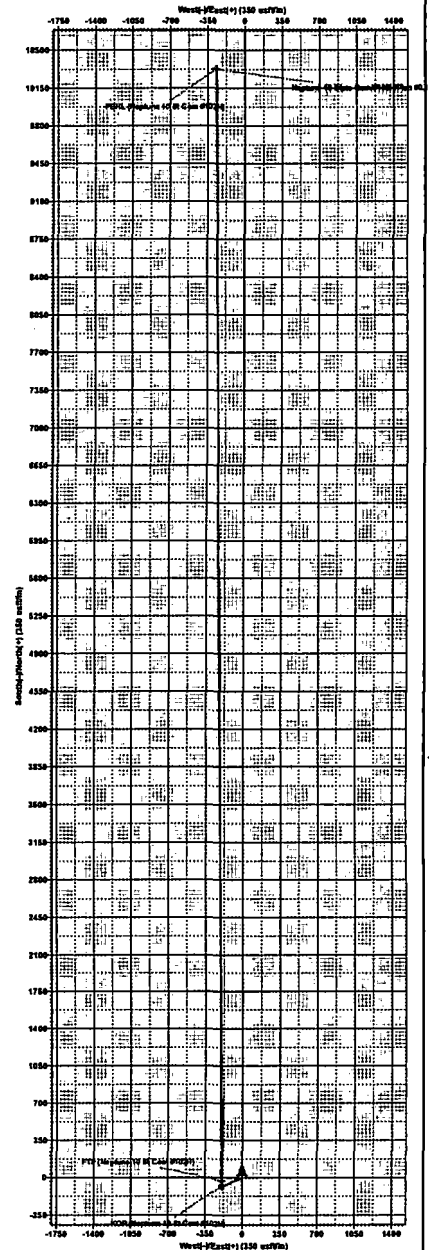
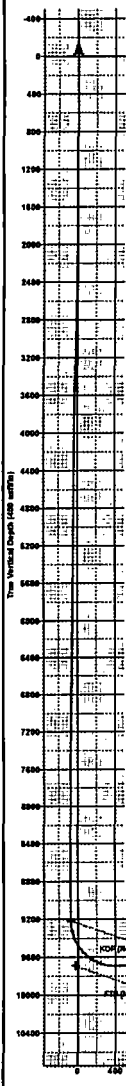
PROJECT DETAILS: Lea County, NM (NAD 83 NME)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #102H				
KB 25 @ 3638.0usft 3613.0				
Northing	Easting	Latitude	Longitude	
448534.00	780654.00	32° 13' 30.810 N	103° 35' 31.810 W	

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1597.2	1.94	246.91	1597.2	-0.8	-1.5	2.00	246.91	-0.8	
4	7589.3	1.94	246.91	7589.8	-80.4	-188.5	0.00	0.00	-75.5	
5	7686.5	0.00	0.00	7683.0	-81.0	-190.0	2.00	180.00	-76.1	
6	9220.0	0.00	0.00	9216.5	-81.0	-190.0	0.00	0.00	-76.1	KOP (Neptune 10 St Com #102H)
7	8970.0	90.00	359.58	8694.0	396.5	-193.5	12.00	359.58	401.3	PBHL (Neptune 10 St Com #102H)
8	19900.8	90.00	359.58	8694.0	10327.0	-267.0	0.00	0.00	10330.5	

CASING DETAILS	
No casing data is available	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)					
Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Neptune 10 St Com #102H)	9216.5	-81.0	-190.0	448533.00	780654.00
PBHL (Neptune 10 St Com #102H)	8694.0	10327.0	-267.0	448581.00	780687.00
FTP (Neptune 10 St Com #102H)	8694.0	-31.0	-190.0	448593.00	780654.00



Scale: 1" = 100' (Horizontal)
1" = 100' (Vertical)
Date: 11/11/2010
By: [Signature]