

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) 334-6178 Fax:(505) 334-6170

District IV
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 C-101
August 1, 2011
Permit 278904

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

1. Operator Name and Address EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702		2. OGRID Number 7377
4. Property Code 327259		3. API Number 30-015-46811
5. Property Name CABALLERO 34 STATE COM		6. Well No. 604H

7. Surface Location

UL - Lot M	Section 34	Township 18S	Range 24E	Lot Idn M	Feet From 516	N/S Line S	Feet From 256	E/W Line W	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot P	Section 34	Township 18S	Range 24E	Lot Idn P	Feet From 510	N/S Line S	Feet From 100	E/W Line E	County Eddy
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9. Pool Information

PENASCO DRAW PERMO PENN OIL	98330
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3762
16. Multiple N	17. Proposed Depth 11941	18. Formation Permo Penn	19. Contractor	20. Spud Date 5/1/2020
Depth to Ground water		Distance from nearest fresh water 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	12.25	9.625	36	1300	480	0
Prod	8.75	5.5	20	7208	1030	
Prod	8.5	5.5	20	11941	1030	

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Whichever is available

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.	OIL CONSERVATION DIVISION
Signature:	
Printed Name: Electronically filed by Kay Maddox	Approved By: Raymond Podany
Title: Regulatory Agent	Title: Geologist
Email Address: kay_maddox@eogresources.com	Approved Date: 3/11/2020 Expiration Date: 3/11/2022
Date: 2/28/2020 Phone: 432-686-3658	Conditions of Approval Attached

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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

WELL LOCATION AND ACREAGE DEDICATION PLAT

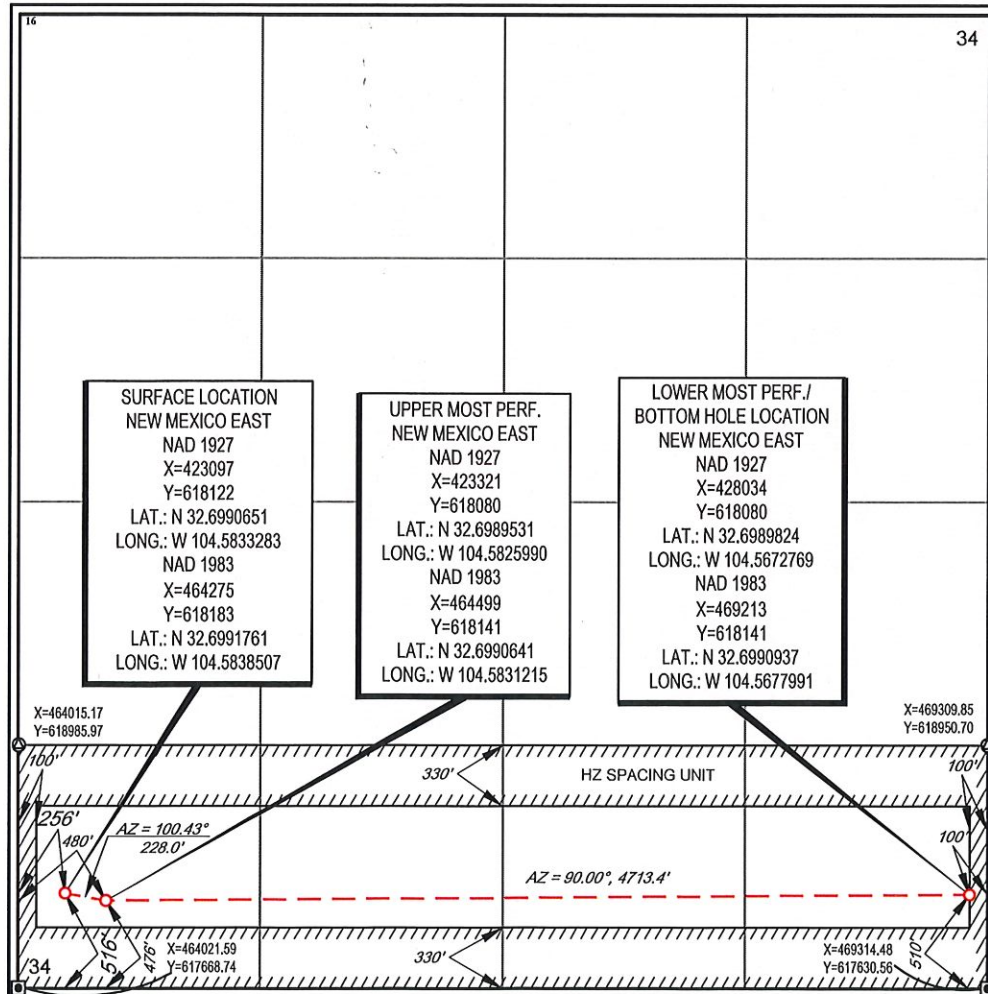
¹ API Number		² Pool Code		³ Pool Name Wildcat; Permo Penn	
⁴ Property Code		⁵ Property Name CABALLERO 34 STATE COM			⁶ Well Number 604H
⁷ OGRID No. 7377		⁸ Operator Name EOG RESOURCES, INC.			⁹ Elevation 3762'

¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	34	18-S	24-E	-	516'	SOUTH	256'	WEST	EDDY

¹¹ Bottom 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
P	34	18-S	24-E	-	510'	SOUTH	100'	EAST	EDDY

¹² Dedicated Acres 160.25	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.



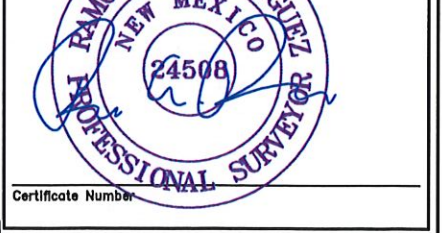
¹⁷OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to 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.

Yolanda A. Maese 2/21/20
Signature Date

Yolanda A. Maese
Printed Name
yolanda_maese@eogresources.com
E-mail Address

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.

01/28/2020
Date of Survey
Signature and Seal of Professional Surveyor



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GAS CAPTURE PLAN

Date: 3/11/2020 OriginalOperator & OGRID No.: [7377] EOG RESOURCES INC Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
CABALLERO 34 STATE COM #604H	30-015-46811	M-34-18S-24E	0516S 0256W	500	None	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Lucid Artesia Company and will be connected to Lucid Artesia Company Low Pressure gathering system located in Eddy County, New Mexico. It will require 800' of pipeline to connect the facility to Low Pressure gathering system. EOG RESOURCES INC provides (periodically) to Lucid Artesia Company a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, EOG RESOURCES INC and Lucid Artesia Company have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Lucid Artesia Company Processing Plant located in Sec. 26, Twn. 18S, Rng. 25E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Lucid Artesia Company system at that time. Based on current information, it is EOG RESOURCES INC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Form APD Comments

Permit 278904

PERMIT COMMENTS

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702	API Number: 30-015-46811
	Well: CABALLERO 34 STATE COM #604H

Created By	Comment	Comment Date
tinah	EOG Resources requests the approval of an intermediate casing string contingency to be determined if losses are encountered in the vertical portion of our wellbore. Surface and production casing will remain the same. Production cement will be tied back 200' into previous casing string if the intermediate string is run.	2/28/2020
ksimmons	Well appears to be in Penasco Draw; Perm Penn (Gas) 82775, which requires 320 acre spacing; operator will need to apply for an NSP if well requires and can justify different spacing.	3/9/2020

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Form APD Conditions

Permit 278904

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702	API Number: 30-015-46811
	Well: CABALLERO 34 STATE COM #604H

OCD Reviewer	Condition
ksimmons	Will require a directional survey with the C-104
ksimmons	Cement is required to circulate on both surface and intermediate 1 strings of casing

State Permit Information:**Well Name: Caballero 34 State Com #604H****Location:**

SL: 516' FSL 256' FWL, Unit M 34-18S-24E

BHL: 510' FSL 100' FEL, Unit P 34-18S-24E

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
12.25"	0'-1,300'	9.625"	36#	J-55	LTC	1.125	1.25	1.80
8.75"	0'-7,208'	5.5"	20#	L-80	BTC	1.125	1.25	1.80
8.5"	7,208'-11,941'	5.5"	20#	L-80	BTC	1.125	1.25	1.80

Cement Program:

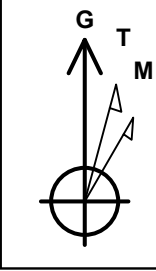
Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
1,300'	270	12.9	1.97	Lead: Class 'C' + 4%PF20(Bentonite Gel) + 2%PF1(Calcium Chloride) + 0.125#/skPF29(Celloflake) + 0.4#/skPF45 (Defoamer) 100% Excess (TOC @ Surface)
	210	14.8	1.34	Tail: Class 'C' + 2%PF1(Calcium Chloride)
11,941'	885	11.9	2.47	Lead: Class 50/50 PozC + 5%PF44(BWOW)(Salt) + 10% PF20(Bentonite Gel) +.2%PF153(Anti Settling Agent(+ 3#/sk OF42(Kolseal) + 0.125#/sk PF29 (celloflake) + 0.4#/sk PF45 (Defoamer) (TOC @ Surface) 35% Excess
	1175	13	1.48	Tail: Class PVL + 1.3% PF44(BWOW)(Salt) + 5% PF174 (Expanding Cement) + 0.5% PF606 (Fluid Loss) + 0.1% PF153 (Anti Settling Agent) + 0.4#/sk PF45 (Defoamer) 35% Excess

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0-1,300'	Fresh Water	8.6-8.8	28-32	N/c
1,300'-11,941'	Cut Brine	8.8-9.6	34-40	Less than

Project: Eddy County (NAD83)
 Site: Caballero
 Well: Caballero 34 State Com #604H
 Wellbore: Lateral
 Design: Plan #1
 Ground Elevation 3762.00
 Northing 618183.00
 Easting 464275.00
 KB @ 3780.00usft (Planning Rig)

PROJECT DETAILS: Eddy County (NAD83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level



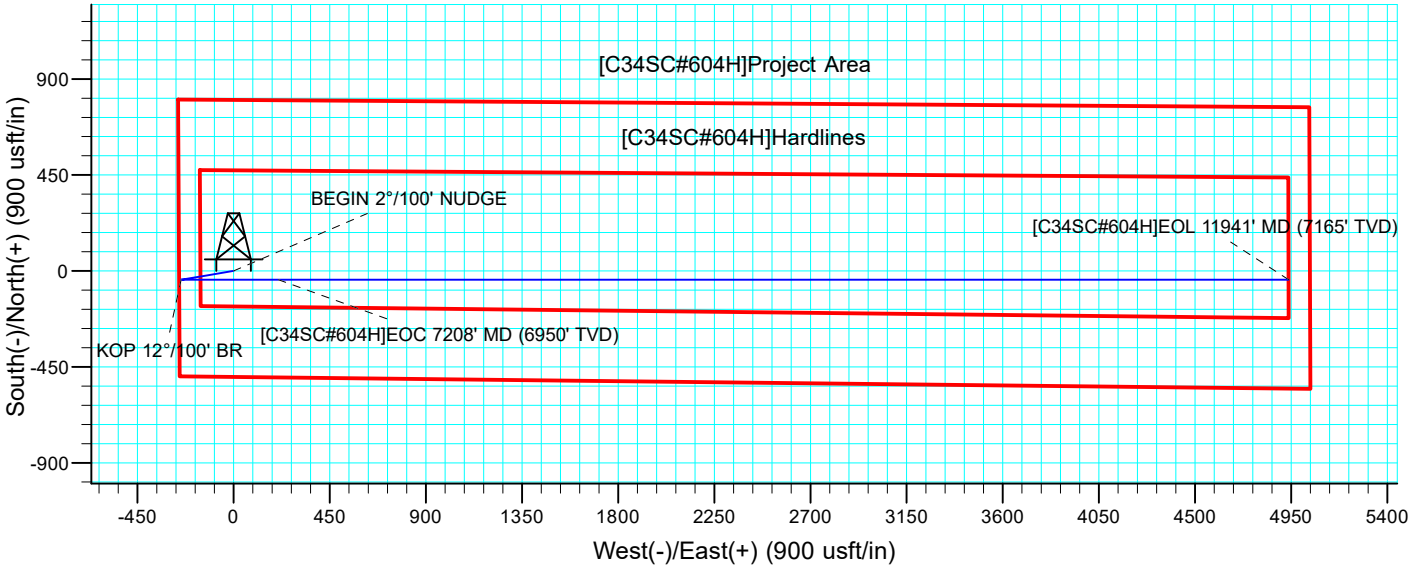
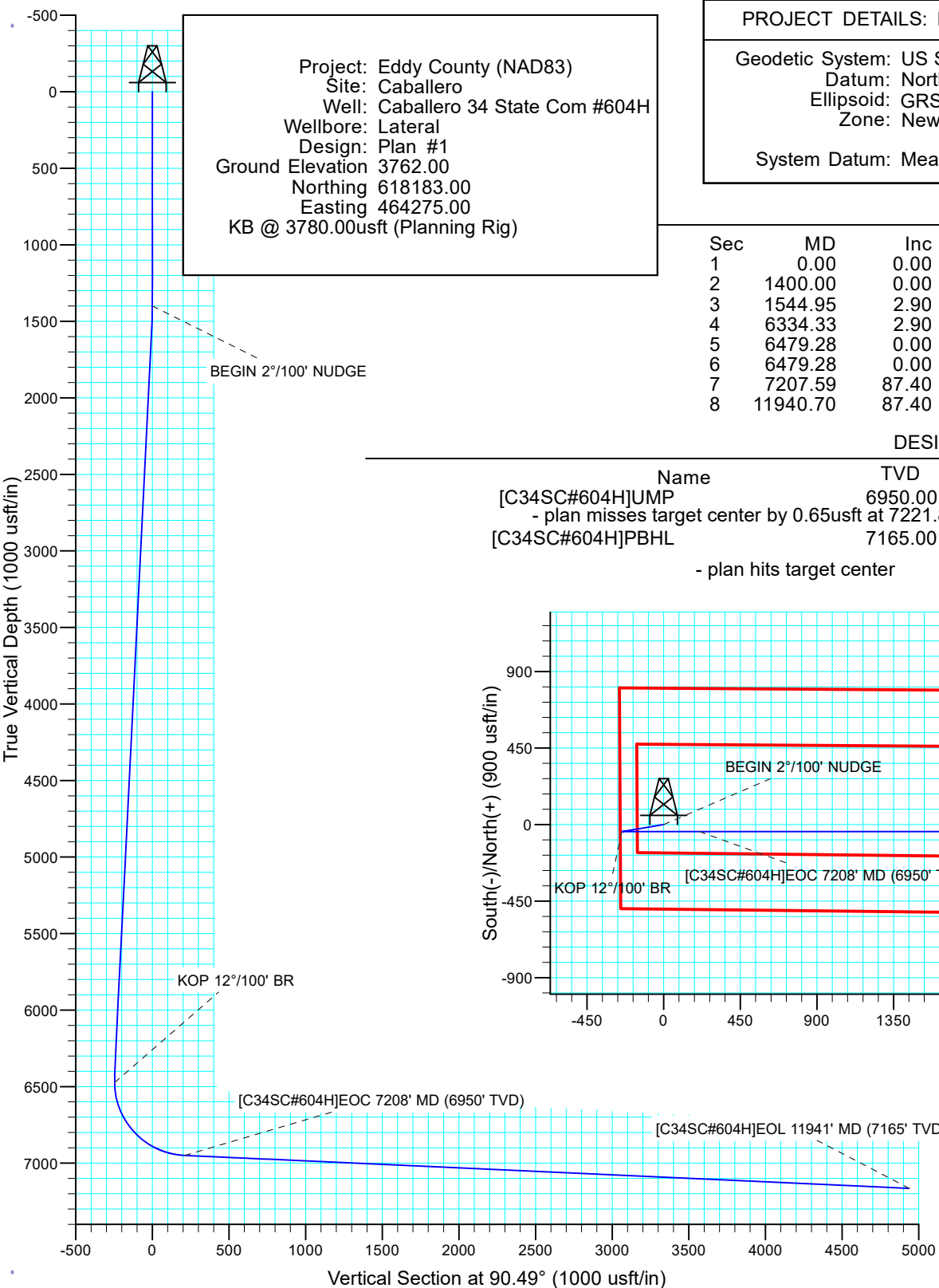
Azimuths to Grid North
 True North: 0.14
 Magnetic North: 7.31
 Magnetic Field
 Strength: 47831.7n
 Dip Angle: 60.30
 Date: 2/20/2020
 Model: IGRF2015

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00
3	1544.95	2.90	260.31	1544.89	-0.62	-3.61	2.00	260.31	-3.61
4	6334.33	2.90	260.31	6328.14	-41.38	-242.39	0.00	0.00	-242.03
5	6479.28	0.00	0.00	6473.03	-42.00	-246.00	2.00	180.00	-245.63
6	6479.28	0.00	0.00	6473.03	-42.00	-246.00	0.00	0.00	-245.63
7	7207.59	87.40	90.00	6950.00	-42.00	209.78	12.00	90.00	210.13
8	11940.70	87.40	90.00	7165.00	-42.00	4938.00	0.00	0.00	4938.18

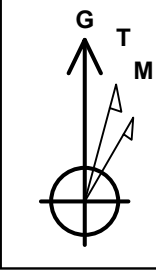
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
[C34SC#604H]UMP	6950.00	-42.00	224.00	618141.00	464499.00
- plan misses target center by 0.65usft at 7221.80usft MD (6950.65 TVD, -42.00 N, 223.97 E)					
[C34SC#604H]PBHL	7165.00	-42.00	4938.00	618141.00	469213.00
- plan hits target center					



Project: Eddy County (NAD83)
 Site: Caballero
 Well: Caballero 34 State Com #604H
 Wellbore: Lateral
 Design: Plan #1
 Ground Elevation 3762.00
 Northing 618183.00
 Easting 464275.00
 KB @ 3780.00usft (Planning Rig)

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 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
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 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level



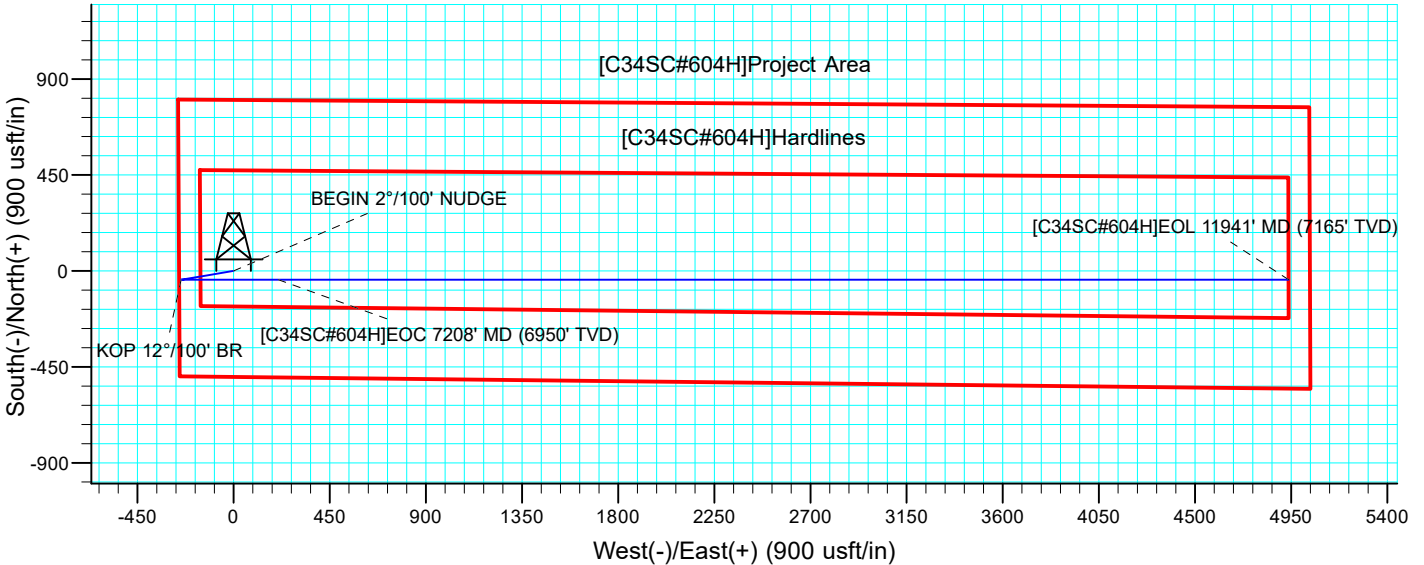
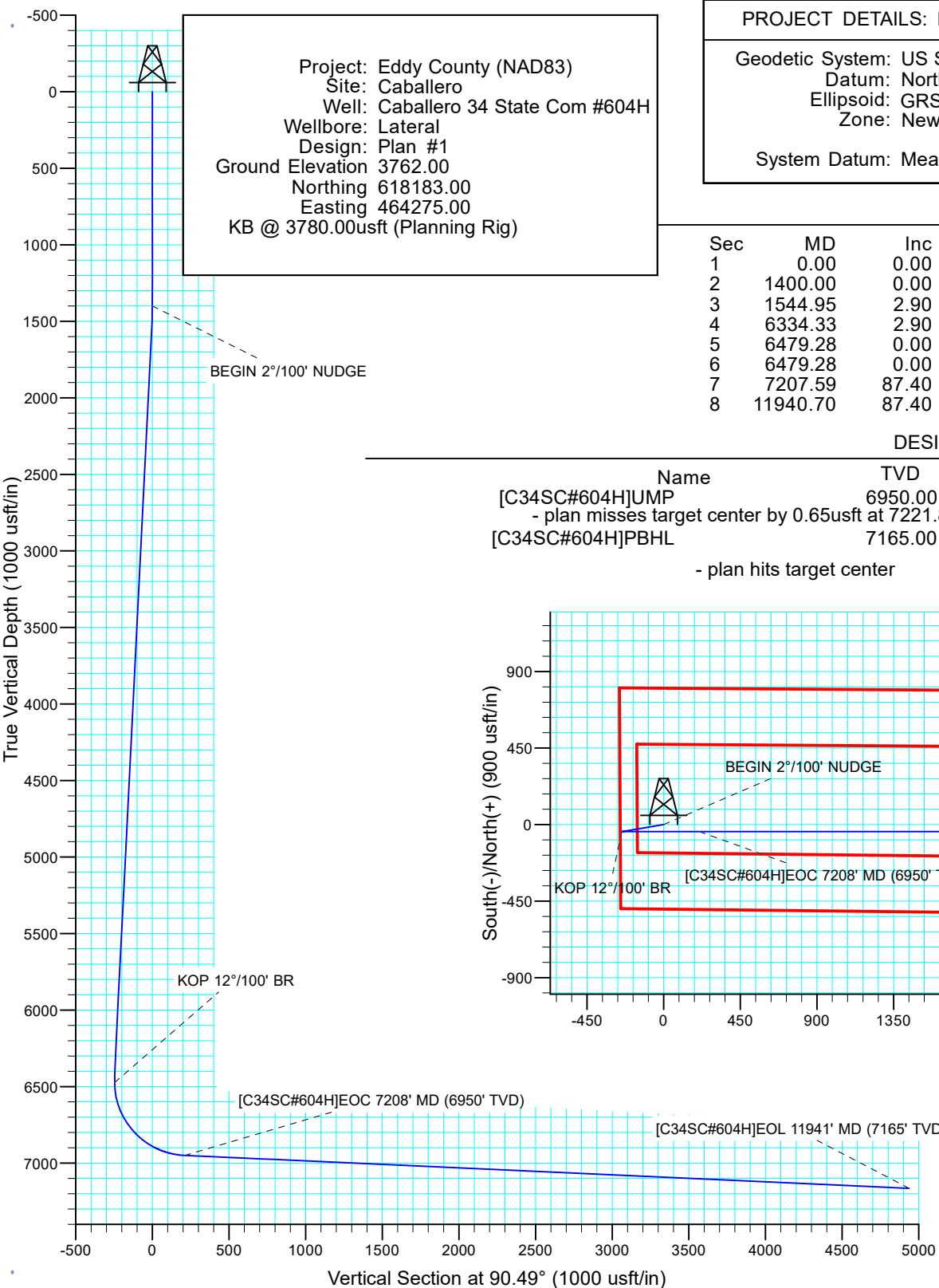
Azimuths to Grid North
 True North: 0.14
 Magnetic North: 7.31
 Magnetic Field
 Strength: 47831.7n
 Dip Angle: 60.30
 Date: 2/20/2020
 Model: IGRF2015

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00
3	1544.95	2.90	260.31	1544.89	-0.62	-3.61	2.00	260.31	-3.61
4	6334.33	2.90	260.31	6328.14	-41.38	-242.39	0.00	0.00	-242.03
5	6479.28	0.00	0.00	6473.03	-42.00	-246.00	2.00	180.00	-245.63
6	6479.28	0.00	0.00	6473.03	-42.00	-246.00	0.00	0.00	-245.63
7	7207.59	87.40	90.00	6950.00	-42.00	209.78	12.00	90.00	210.13
8	11940.70	87.40	90.00	7165.00	-42.00	4938.00	0.00	0.00	4938.18

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
[C34SC#604H]UMP	6950.00	-42.00	224.00	618141.00	464499.00
- plan misses target center by 0.65usft at 7221.80usft MD (6950.65 TVD, -42.00 N, 223.97 E)					
[C34SC#604H]PBHL	7165.00	-42.00	4938.00	618141.00	469213.00
- plan hits target center					



State Permit Information:**Well Name: Caballero 34 State Com #604H****Location:**

SL: 516' FSL 256' FWL, Unit M 34-18S-24E

BHL: 510' FSL 100' FEL, Unit P 34-18S-24E

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
12.25"	0'-1,300'	9.625"	36#	J-55	LTC	1.125	1.25	1.80
8.75"	0'-7,208'	5.5"	20#	L-80	BTC	1.125	1.25	1.80
8.5"	7,208'-11,941'	5.5"	20#	L-80	BTC	1.125	1.25	1.80

Cement Program:

Depth	No. Sacks	Wt. lb/gal	Yld Ft ³ /ft	Slurry Description
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	1175	13	1.48	Tail: Class PVL + 1.3% PF44(BWOW)(Salt) + 5% PF174 (Expanding Cement) + 0.5% PF606 (Fluid Loss) + 0.1% PF153 (Anti Settling Agent) + 0.4#/sk PF45 (Defoamer) 35% Excess

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Depth	Type	Weight (ppg)	Viscosity	Water Loss
0-1,300'	Fresh Water	8.6-8.8	28-32	N/c
1,300'-11,941'	Cut Brine	8.8-9.6	34-40	Less than

Intent As Drilled

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
									EDDY
Latitude					Longitude				NAD
									83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
									EDDY
Latitude					Longitude				NAD
									83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
									EDDY
Latitude					Longitude				NAD
									83

Is this well the defining well for the Horizontal Spacing Unit?

Is this well an infill well?

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number