

**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 278964

**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
		3. API Number 30-015-46809
4. Property Code 327256	5. Property Name WAR HOUND 2 STATE COM	6. Well No. 401H

**7. Surface Location**

UL - Lot E	Section 2	Township 17S	Range 27E	Lot Idn E	Feet From 2612	N/S Line N	Feet From 260	E/W Line W	County Eddy
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**8. Proposed Bottom Hole Location**

UL - Lot H	Section 2	Township 17S	Range 27E	Lot Idn H	Feet From 2466	N/S Line N	Feet From 100	E/W Line E	County Eddy
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**9. Pool Information**

HART CANYON; ABO	97450
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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 3468
16. Multiple N	17. Proposed Depth 10844	18. Formation Abo	19. Contractor	20. Spud Date 4/1/2020
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	6415	945	0
Prod	8.5	5.5	20	10844	945	

**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.  Signature:	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Electronically filed by Kay Maddox	Approved By: Raymond Podany	
Title: Regulatory Agent	Title: Geologist	
Email Address: kay_maddox@eogresources.com	Approved Date: 3/9/2020	Expiration Date: 3/9/2022
Date: 3/4/2020	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

<sup>1</sup> API Number		<sup>2</sup> Pool Code	<sup>3</sup> Pool Name Wildcat; Abo
<sup>4</sup> Property Code	<sup>5</sup> Property Name WAR HOUND 2 STATE COM		<sup>6</sup> Well Number 401H
<sup>7</sup> OGRID No. 7377	<sup>8</sup> Operator Name EOG RESOURCES, INC.		<sup>9</sup> Elevation 3468'

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	02	17-S	27-E	-	2612'	NORTH	260'	WEST	EDDY

<sup>11</sup>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
H	02	17-S	27-E	-	2466'	NORTH	100'	EAST	EDDY

<sup>12</sup> Dedicated Acres 160.00	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.

		<p><sup>17</sup>OPERATOR CERTIFICATION</p> <p>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.</p> <p>Tina Huerta 3/4/20</p> <p>Signature Date</p> <p>Tina Huerta</p> <p>Printed Name</p> <p>tina_huerta@eogresources.com</p> <p>E-mail Address</p>	
<p><sup>18</sup>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>02/28/2020</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>RAMON A. DOMINGUEZ</p> <p>NEW MEXICO</p> <p>24508</p> <p>PROFESSIONAL SURVEYOR</p> <p>Certificate Number</p>		<p>SURFACE LOCATION NEW MEXICO EAST NAD 1927 X=523945 Y=678221 LAT.: N 32.8644875 LONG.: W 104.2553487 NAD 1983 X=565124 Y=678284 LAT.: N 32.8646006 LONG.: W 104.2558630</p> <p>UPPER MOST PERF. NEW MEXICO EAST NAD 1927 X=524199 Y=678246 LAT.: N 32.8645564 LONG.: W 104.2545228 NAD 1983 X=565378 Y=678309 LAT.: N 32.8646694 LONG.: W 104.2550370</p> <p>LOWER MOST PERF./ BOTTOM HOLE LOCATION NEW MEXICO EAST NAD 1927 X=528625 Y=678139 LAT.: N 32.8642518 LONG.: W 104.2401076 NAD 1983 X=569804 Y=678202 LAT.: N 32.8643650 LONG.: W 104.2406214</p>	

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**Santa Fe, NM 87505**

## GAS CAPTURE PLAN

Date: 3/9/2020

☒ Original

Operator & 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, recomple 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
WAR HOUND 2 STATE COM #401H	30-015-46809	E-2-17S-27E	2612N 0260W	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 500' 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 278964

PERMIT COMMENTS

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702		API Number: 30-015-46809
		Well: WAR HOUND 2 STATE COM #401H

Created By	Comment	Comment Date
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Form APD Conditions  
Permit 278964

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: EOG RESOURCES INC [7377] P.O. Box 2267 Midland, TX 79702		API Number: 30-015-46809
		Well: WAR HOUND 2 STATE COM #401H
OCD Reviewer	Condition	
ksimmons	Will require a directional survey with the C-104	
ksimmons	Cement is required to circulate on both surface and intermediate1 strings of casing	

**State Permit Information:****Well Name: War Hound 2 State Com #401H****Location:**

SL: 2612' FNL 260' FWL, Unit E 2-17S-27E

BHL: 2466' FNL 100' FEL, Unit H 2-17S-27E

**Casing Program:**

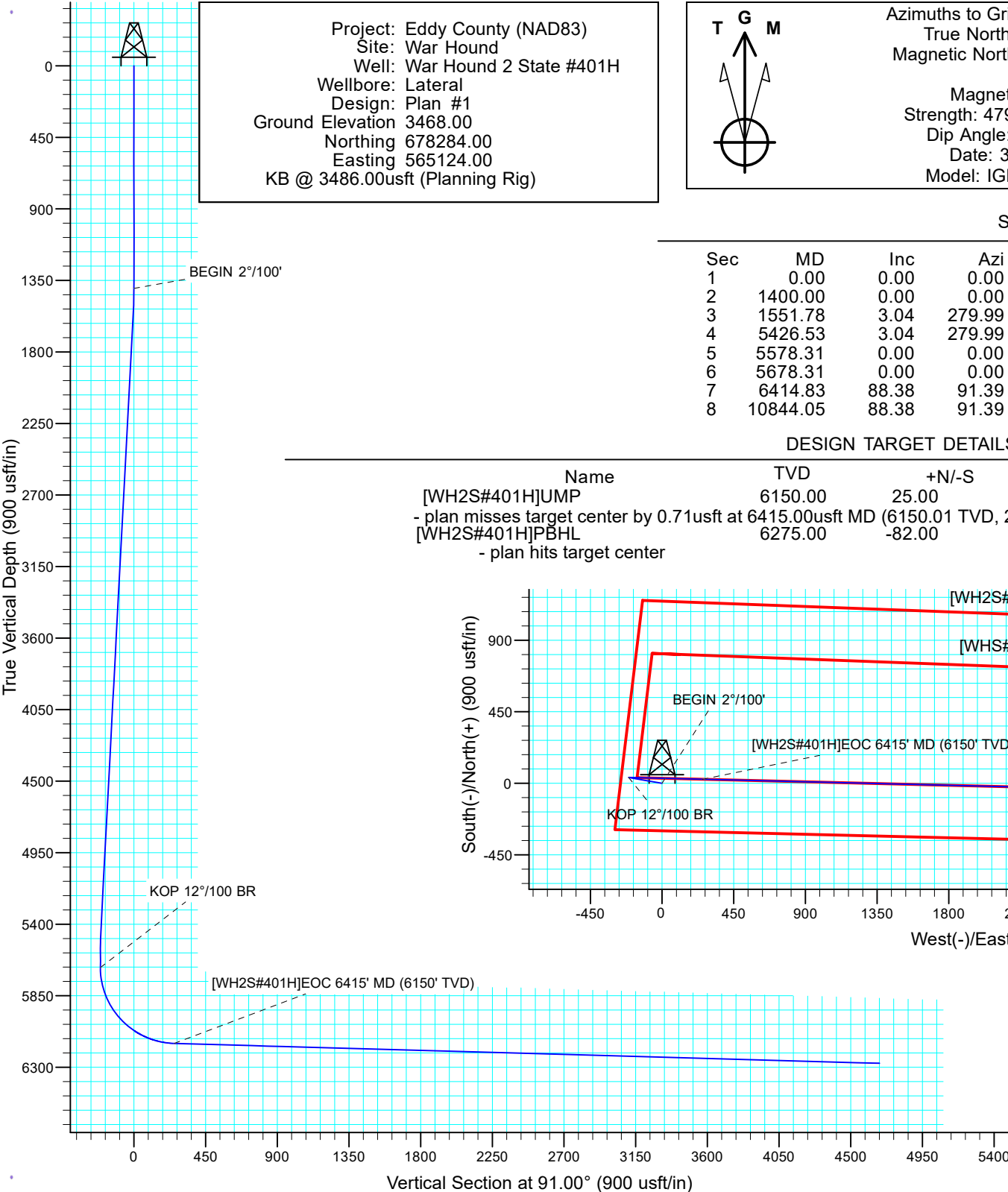
Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF <sub>min</sub> Collapse	DF <sub>min</sub> Burst	DF <sub>min</sub> Tension
12.25"	0'-1,300'	9.625"	36#	J-55	LTC	1.125	1.25	1.80
8.75"	0'-6,415'	5.5"	20#	P-110	BTC	1.125	1.25	1.80
8.5"	6,415'-10,844'	5.5"	20#	P-110	BTC	1.125	1.25	1.80

**Cement Program:**

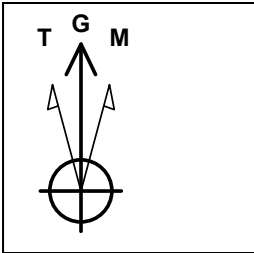
Depth	No. Sacks	Wt. lb/gal	Yld Ft <sup>3</sup> /ft	Slurry Description
1,300'	270	12.9	1.97	Lead: Class 'C' + 4%PF20(Bentonite Gel) + 2%PF1(Calcium Chloride) + 0.125#/skPF29(Celloflake) + 0.4#/skPF45 (Defoamer) 100% Excess (TOC @ Surface)
	210	14.8	1.34	Tail: Class 'C' + 2%PF1(Calcium Chloride)
10,844'	775	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
	1115	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'-10,844'	Cut Brine	8.8-9.5	34-40	Less than



Project: Eddy County (NAD83)  
Site: War Hound  
Well: War Hound 2 State #401H  
Wellbore: Lateral  
Design: Plan #1  
Ground Elevation 3468.00  
Northing 678284.00  
Easting 565124.00  
KB @ 3486.00usft (Planning Rig)



Azimuths to Grid North  
True North: -0.04°  
Magnetic North: 6.99°  
  
Magnetic Field  
Strength: 47963.3nT  
Dip Angle: 60.50°  
Date: 3/3/2020  
Model: IGRF2015

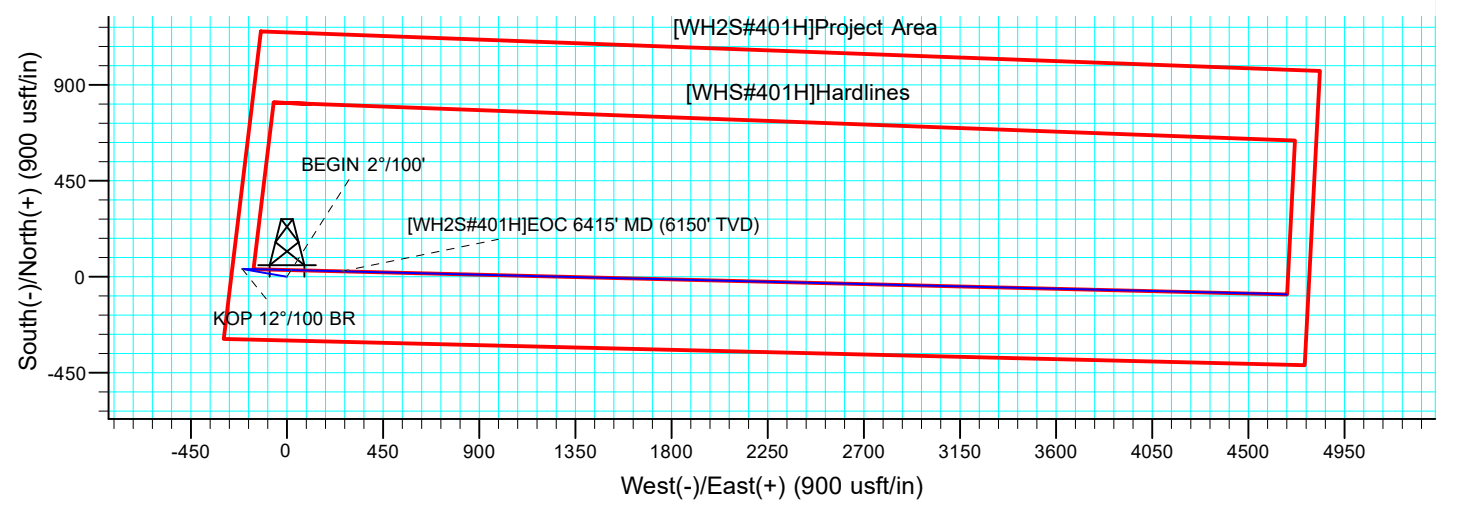
PROJECT DETAILS: Eddy County (NAD83)  
  
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
  
System Datum: Mean Sea Level

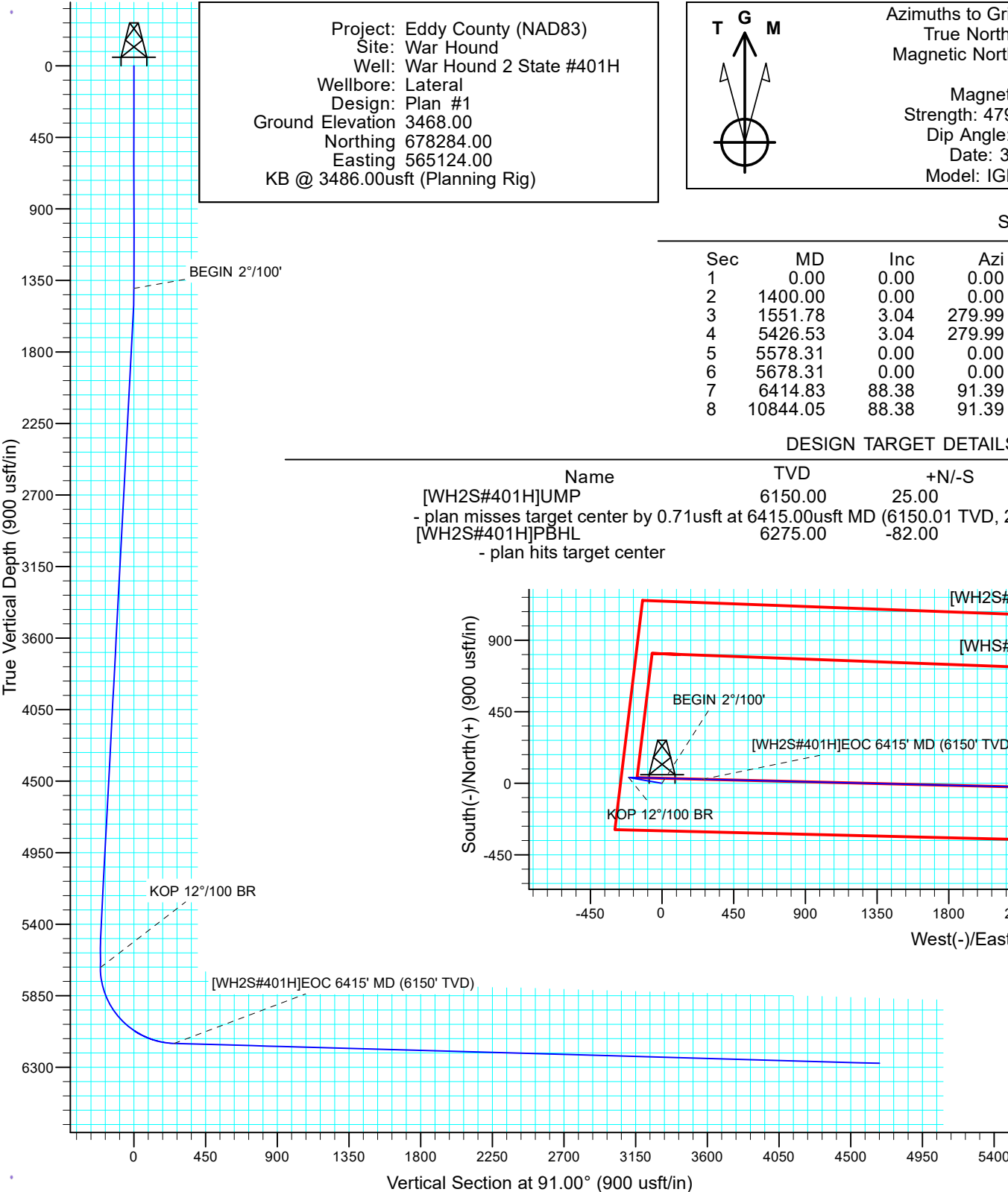
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
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	1551.78	3.04	279.99	1551.71	0.70	-3.96	2.00	279.99	-3.97
4	5426.53	3.04	279.99	5421.02	36.30	-206.04	0.00	0.00	-206.65
5	5578.31	0.00	0.00	5572.73	37.00	-210.00	2.00	180.00	-210.62
6	5678.31	0.00	0.00	5672.73	37.00	-210.00	0.00	0.00	-210.62
7	6414.83	88.38	91.39	6150.00	25.71	253.85	12.00	91.39	253.36
8	10844.05	88.38	91.39	6275.00	-82.00	4680.00	0.00	0.00	4680.72

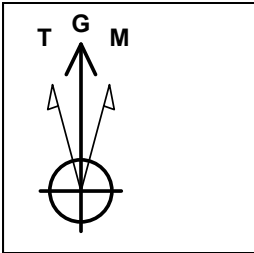
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
[WH2S#401H]JUMP	6150.00	25.00	254.00	678309.00	565378.00
- plan misses target center by 0.71usft at 6415.00usft MD (6150.01 TVD, 25.71 N, 254.02 E)					
[WH2S#401H]PBHL	6275.00	-82.00	4680.00	678202.00	569804.00
- plan hits target center					





Project: Eddy County (NAD83)  
Site: War Hound  
Well: War Hound 2 State #401H  
Wellbore: Lateral  
Design: Plan #1  
Ground Elevation 3468.00  
Northing 678284.00  
Easting 565124.00  
KB @ 3486.00usft (Planning Rig)



Azimuths to Grid North  
True North: -0.04°  
Magnetic North: 6.99°  
  
Magnetic Field  
Strength: 47963.3nT  
Dip Angle: 60.50°  
Date: 3/3/2020  
Model: IGRF2015

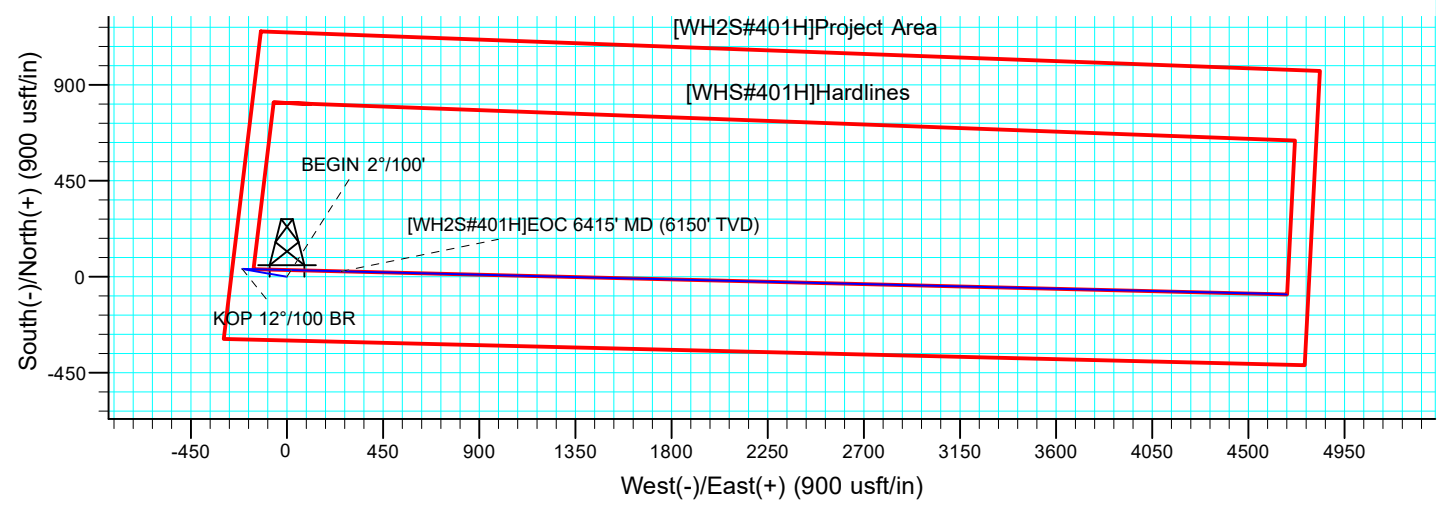
PROJECT DETAILS: Eddy County (NAD83)  
  
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
  
System Datum: Mean Sea Level

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
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	1551.78	3.04	279.99	1551.71	0.70	-3.96	2.00	279.99	-3.97
4	5426.53	3.04	279.99	5421.02	36.30	-206.04	0.00	0.00	-206.65
5	5578.31	0.00	0.00	5572.73	37.00	-210.00	2.00	180.00	-210.62
6	5678.31	0.00	0.00	5672.73	37.00	-210.00	0.00	0.00	-210.62
7	6414.83	88.38	91.39	6150.00	25.71	253.85	12.00	91.39	253.36
8	10844.05	88.38	91.39	6275.00	-82.00	4680.00	0.00	0.00	4680.72

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
[WH2S#401H]JUMP	6150.00	25.00	254.00	678309.00	565378.00
- plan misses target center by 0.71usft at 6415.00usft MD (6150.01 TVD, 25.71 N, 254.02 E)					
[WH2S#401H]PBHL	6275.00	-82.00	4680.00	678202.00	569804.00
- plan hits target center					





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
Latitude					Longitude				NAD

## First Take Point (FTP)

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

## Last Take Point (LTP)

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

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

KZ 06/29/2018