RECEIVED: REVIEWER: APP NO: LRL pLEL2126530018 09/15/21

NEW MEXICO OIL CONSERVATION DIVISION



Coological & Eng	incoring Purcau
- Geological & Eng 1220 South St. Francis Driv	
ADMINISTRATIVE AP	PLICATION CHECKLIST
	TIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND ISING AT THE DIVISION LEVEL IN SANTA FE
Applicant: EOG Resources, Inc.	OGRID Number: 7377
Well Name: Dragon 36 State #510H well	API: 30-025-49283
Pool: RED HILLS;LOWER BONE SPRING Pool	Pool Code: 51020
	N REQUIRED TO PROCESS THE TYPE OF APPLICATION TED BELOW
1) TYPE OF APPLICATION: Check those which app A. Location – Spacing Unit – Simultaneous De NSL NSP (PROJECT AREA)	
B. Check one only for [1] or [1] [1] Commingling – Storage – Measureme DHC CTB PLC PC [11] Injection – Disposal – Pressure Increas WFX PMX SWD IP 2) NOTIFICATION REQUIRED TO: Check those which A. Offset operators or lease holders B. Royalty, overriding royalty owners, reversely	C OLS OLM Se - Enhanced Oil Recovery I EOR PPR Chapply. FOR OCD ONLY Notice Complete
B. Royalty, overriding royalty owners, reverse C. Application requires published notice D. Notification and/or concurrent approved. Notification and/or concurrent approved. Surface owner G. For all of the above, proof of notification. No notice required	val by SLO val by BLM Content Complete
3) CERTIFICATION: I hereby certify that the inform administrative approval is accurate and comp understand that no action will be taken on this notifications are submitted to the Division.	plete to the best of my knowledge. I also
Note: Statement must be completed by an ind	ividual with managerial and/or supervisory capacity.
	9/15/2021
T. Maria A. Tarah	Date
Kaitlyn A. Luck	2 3
Print or Type Name	505-954-7286
Annhall	Phone Number
	kaluck@hollandhart.com

e-mail Address

Signature



Kaitlyn A. Luck Phone (505) 954-7286 kaluck@hollandhart.com

September 15, 2021

VIA ONLINE FILING

Adrienne Sandoval
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: Application of EOG Resources, Inc. for administrative approval of an unorthodox well location for its Dragon 36 State #510H well in the W/2 of Section 36, Township 24 South, Range 33 East, N.M.P.M., Lea County, New Mexico.

Dear Ms. Sandoval:

EOG Resources, Inc. (OGRID No. 7377) seeks administrative approval of an unorthodox well location for its **Dragon 36 State #510H well** (API No. 30-025-49283) to be completed within the RED HILLS;LOWER BONE SPRING Pool [51020], in a 320-acre, more or less, spacing unit underlying the W/2 of Section 36, Township 24 South, Range 33 East, N.M.P.M., Lea County, New Mexico.

This well is drilled and is to be completed as follows:

- the <u>surface location</u> is located 655 feet from the south line and 746 feet from the west line (Unit M) of Section 36,
- the <u>bottom hole location</u> is located 108 feet from the north line and 520 feet from the west line (Unit D) of Section 36,
- the <u>first take point</u> is located 100 feet from the south line and 244 feet from the west line (Unit M) of Section 36, and
- the <u>last take point</u> is located 108 feet from the north line and 520 feet from the west line (Unit D) of Section 36.

Since this acreage is governed by the Division's statewide rules, the completed interval for this well will be unorthodox because it is closer than the standard offsets to the western boundary of the spacing unit at the first take point and encroaches on the SE/4 SE/4 of Section 35. Approval

T 505.988.4421 F 505.983.6043 110 North Guadalupe, Suite 1, Santa Fe, NM 87501-1849 Mail to: P.O. Box 2208, Santa Fe, NM 87504-2208 www.hollandhart.com

Alaska Colorado

Montana Nevada New Mexico Utah Washington, D.C. Wyoming of the unorthodox completed interval will allow EOG to use their preferred well spacing plan for horizontal wells in this area and thereby prevent waste.

Exhibit A is a Form C-102 showing the completed interval of the proposed **Dragon 36** State #510H well encroaches on the spacing unit/tracts to the west in Sections 35.

Exhibit B is a plat for Sections 35 and 36 that west the proposed **Dragon 36 State #510H** well in relation to adjoining spacing unit/tracts to the east.

Ownership is diverse between the subject spacing unit and the affected spacing unit to the west. **Exhibit C** includes the tracking information that reflects the "affected parties" were sent a copy of this application with all attachments by certified mail advising that any objections must be filed in writing with the Division within 20 days from the date the Division receives the application. The following are the affected parties:

Type	Affected Party	Location	Date Sent
Operator/	EOG RESOURCES, INC.	SW/4SW/4 of	N/A
Working		Section 36	
Interest			
Royalty	BUREAU OF LAND MANAGEMENT	SW/4SW/4 of	9/9/21
Interest		Section 36	

Exhibit D is a statement from a petroleum engineer providing justification for the needed exception.

Your attention to this matter is appreciated.

Sincerely,

Kaitlyn A. Luck

ATTORNEY FOR EOG RESOURCES, INC.

EXHIBIT - A

<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 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

	¹ API Number 30-025-		² Pool Code ³ Pool Name				
⁴ Property Code		⁵ Pr	operty Name	⁶ Well Number			
		DRAGO	N 36 STATE	510H			
⁷ OGRID No.		⁸ O _I	perator Name	⁹ Elevation			
7377		3492'					

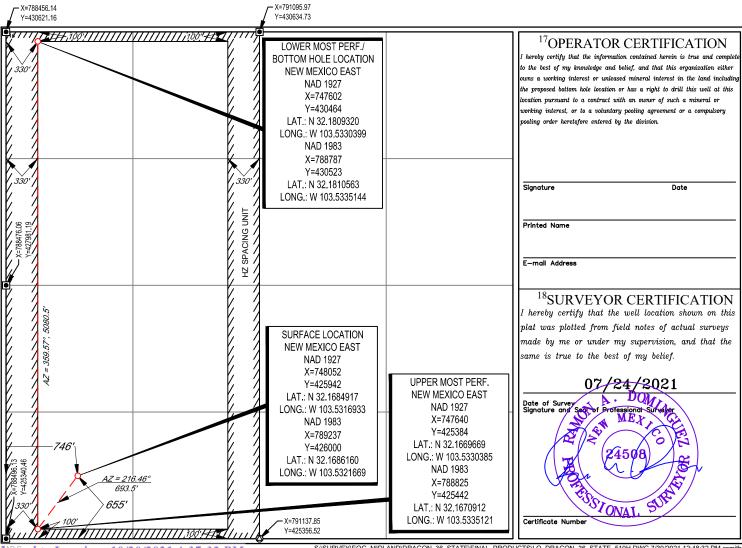
¹⁰Surface Location

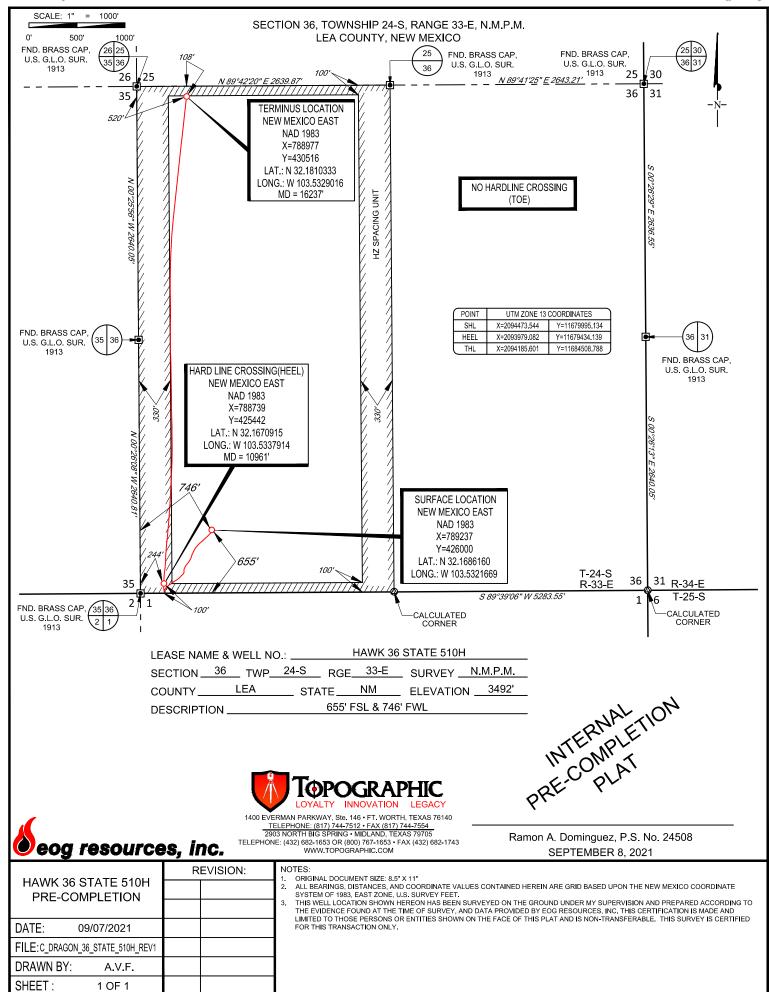
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	24-S	33-E	-	655'	SOUTH	746'	WEST	LEA

¹¹Bottom Hole Location If Different From Surface

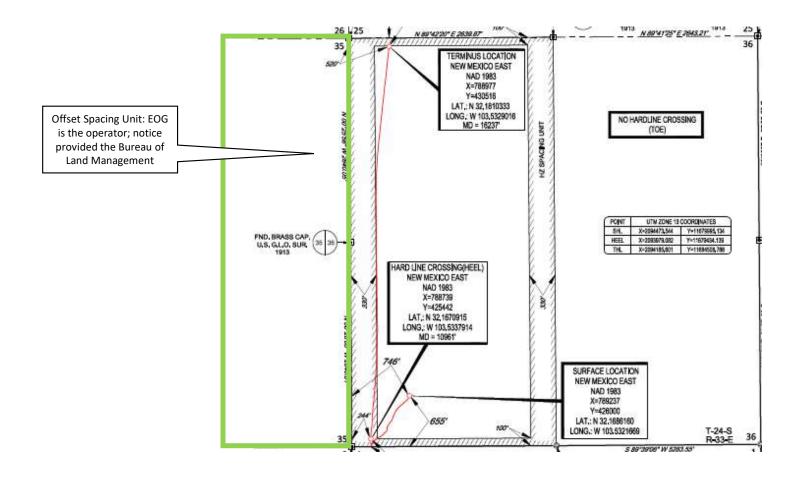
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	36	24-S	33-E	-	100'	NORTH	330'	WEST	LEA
¹² Dedicated Acres 320.00	¹³ Joint or I	infill 14Co	onsolidation Co	de ¹⁵ Ord	er No.				

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.





Z:\SURVEY\EOG_MIDLAND\DRAGON_36_STATE\FINAL_PRODUCTS\C_DRAGON_36_STATE_510H_REV1.DWG 9/8/2021 10:03:59 AM eochoa





September 1, 2021

Certification of Ownership

I have reviewed the ownership of the oil and gas leasehold in Section 35 24S-33E, Lea County, New Mexico, for purposes of the unorthodox location for EOG's Dragon 36 State 510H well located in the SW/4SW/4 of Section 36-24S-33E. As of the date of this letter, the affected parties are:

- EOG Resources, Inc. 5509 Champions Dr. Midland, TX 79706
- Bureau of Land Management 301 Dinosaur Tr. Santa Fe, NM 87508

Sincerely,

EOG Resources, Inc.

Reece Cook Senior Landman



Kaitlyn A. Luck Phone (505) 954-7286 kaluck@hollandhart.com

September 15, 2021

<u>VIA CERTIFIED MAIL</u> RETURN RECEIPT REQUESTED

TO: ALL AFFECTED PERSONS

Re: Application of EOG Resources, Inc. for administrative approval of an unorthodox well location for its Dragon 36 State #510H well in the W/2 of Section 36, Township 24 South, Range 33 East, N.M.P.M., Lea County, New Mexico.

Ladies and Gentlemen:

Enclosed is a copy of the above-referenced application which was filed with the New Mexico Oil Conservation Division on this date. Any objection to this application must be filed in writing within twenty days from this date with the applicant and the New Mexico Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, New Mexico, 87505. If no objection is received within this twenty-day period, this application may be approved administratively by the Division.

If you have any questions about this application, please contact the following:

Reece Cook EOG Resources, Inc. (432) 686-3600 Reece Cook@eogresources.com

Sincerely,

Kaitlyn A. Luck

ATTORNEY FOR EOG RESOURCES, INC.

Parent ID	Mail	Name	Delivery Address	City	ST	Zip	MailClass	TrackingNo	Well
	Date								
31309	09/15/	Bureau of Land	620 E Greene St	Carlsbad	NM	88220-6292	Certified with Return	941481189876	71040 - EOG - Dragon 36 State
	2021	Management					Receipt (Signature)	5854914286	510H NSL Notice List - 1



P.O. Box 2267, Midland, Texas 79702 Phone: (432) 686-3600 Fax: (432) 686-3773

September 1, 2021

Re: EOG Resources NSL Application

Dragon 36 State 510H

To whom it may concern:

Due to drilling complications, a portion of the Dragon 36 State 510H was drilled at a non-standard location in the Bonespring formation, specifically the Second Sand D2. The ability to complete the full lateral is expected to yield a higher ultimate recovery than just completing a portion of the lateral, thereby preventing waste and protecting correlative rights.

Sincerely,

DAVID C. JONYA

EOG Resources David Carlos Sonka

Reservoir Engineer

From: Kaitlyn A. Luck Lowe, Leonard, EMNRD To:

Subject: [EXTERNAL] RE: NSL - EOG - Dragon Well No. 510H - HSU

Monday, September 27, 2021 9:17:34 AM Date:

Attachments: image001.png

Dragon 509 - 3002549282.pdf

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi, good morning – sorry for the delay on getting back to you about this. Here's the APD for the Dragon 509H well that is the defining well allowing for the spacing unit. Let me know if you have any other questions on this one, thanks!

Kaitlyn

Kaitlyn A. Luck – Associate I Holland & Hart LLP I (o) 505.954.7286 (m) 361.648.1973

From: Lowe, Leonard, EMNRD < Leonard.Lowe@state.nm.us>

Sent: Thursday, September 23, 2021 3:42 PM To: Kaitlyn A. Luck <KALuck@hollandhart.com> Subject: NSL - EOG - Dragon Well No. 510H - HSU

Importance: High

External Email

Ms. Luck,

Good afternoon,

In review of your NSL application. The well's HSU 320 acres. The pool/formation has criteria of 80 acre spacing with 330 ft set backs.

It appears that you may be seeking a larger than allowed HSU for this well. Is this well an infill for a defining well that would accommodate this increase in spacing unit? If not then I believe an NSP application will need to be submitted for this well's increase HSU.

Leonard R. Lowe

Engineering Bureau OCD - EMNRD 5200 Oakland Ave. NE Albuquerque, N.M. 87113

C: 505-930-6717

http://www.emnrd.state.nm.us/ocd/

Form C-101 August 1, 2011

Permit 299026

<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

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

New Well

16. Multiple

Depth to Ground water

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

•	ne and Address						2	. OGRID Number	
	RESOURCES II	NC					_	7377	
	Box 2267						3	. API Number	
	and, TX 79702							30-025-492	282
. Property Cod	е	5. F	Property Name				6	. Well No.	
39643 DRA				ATE				509H	
				7. Sur	face Location				
IL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	36	24S	33E	M	664	S	758	8 W	Lea
				8. Proposed E	Bottom Hole Location	on			
IL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	36	24S	33E	D	100	N	129	0 W	Lea
				9. Poc	ol Information				
RED HILLS:L	OWER BONE SP	RING						51020)

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

OIL

16155

17. Proposed Depth

21. Proposed Casing and Cement Program

Lower Bone Spring

Distance from nearest fresh water well

18. Formation

State

19. Contractor

3491

8/18/2020

Distance to nearest surface water

20. Spud Date

	2111 to pood a casing and comment rogium									
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC				
Surf	16	13.375	54.5	1310	490	0				
Int1	12.25	9.625	40	4000	750	0				
Int1	12.25	9.625	40	5120	320	0				
Prod	8.75	5.5	17	11502	620	0				
Prod	8.5	5.5	17	16155	1330	4620				

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program Working Pressure Type Test Pressure Manufacturer Double Ram 5000 3000

knowledge and b	pelief. have complied with 19.15.14.9 (A)	s true and complete to the best of my NMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATIO	ON DIVISION	
Printed Name:	Electronically filed by Kay Maddo	ox .	Approved By:	Paul F Kautz		
Title:	Title: Regulatory Agent			Geologist		
Email Address:	Email Address: kay_maddox@eogresources.com			8/4/2021	Expiration Date: 8/4/2023	
Date:	8/3/2021	Phone: 432-686-3658	Conditions of Approval Attached			

Section Township

Range

Lot Idn

County

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

Phone: (505) 476-3460 Fax: (505) 476-3462

UL or lot no.

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

¹API Number 30-025-49282 30 025		2 ² Pool Code 51020	Red Hills; Lower Bone Spring		
⁴ Property Code 39643	•		operty Name N 36 STATE	⁶ Well Number 509H	
⁷ OGRID №. 7377		•	erator Name OURCES, INC.	⁹ Elevation 3491'	

¹⁰Surface Location

North/South line

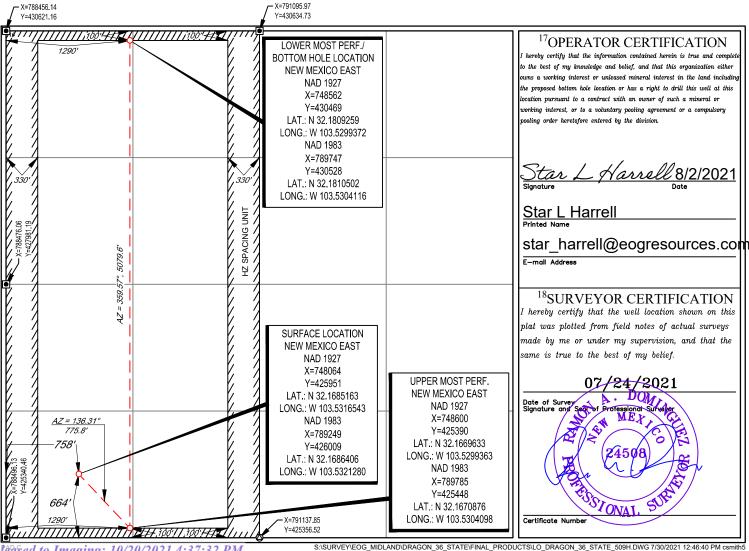
Feet from the

East/West line

Feet from the

M	36	24-S	33-E	_	664'	SOUTH	758'	WEST	LEA
•	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
D	36	24-S	33-E	_	100'	NORTH	1290'	WEST	LEA
12Dedicated Acres	¹³ Joint or	Infill 14Co	onsolidation Co	de ¹⁵ Ord	er 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.



Permit 299026

Form APD Conditions

<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**

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
EOG RESOURCES INC [7377]	30-025-49282
P.O. Box 2267	Well:
Midland, TX 79702	DRAGON 36 STATE #509H

	,							
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	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud							
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface 2) PRODUCTION CASING - Cement must tie back into intermediate casing							
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement							
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water							
pkautz	1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104							
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD. If an APD expires and if site construction has occurred, site remediation is required.							
pkautz	Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.							

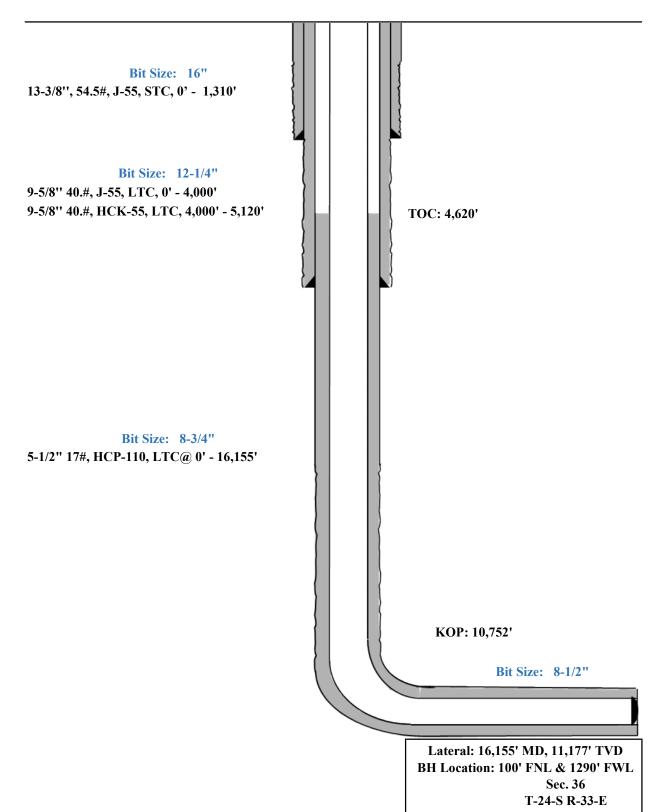


Dragon 36 State 509H

664' FSL Revised Wellbore KB: 3516'
758' FWL GL: 3491'

Section 36

T-24-S, R-33-E API: 30-0**-****





Dragon 36 State 509H

Permit Information:

Well Name: Dragon 36 State 509H

Location: SHL: 664' FSL & 758' FWL, Section 36, T-24-S, R-33-E, Lea Co., N.M.

BHL: 100' FNL & 1290' FWL, Section 36, T-24-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole		Csg				DFmin	DFmin	DFmin
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
16"	0' - 1,310'	13.375"	54.5#	J-55	STC	1.125	1.25	1.6
12.25"	0' - 4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.6
12.25"	4,000' - 5,120'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.6
8.75"	0' - 11,502'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.6
8.5"	11,502' - 16,155'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.6

Cementing Program:

	g 1 1 0g1 uv	Wt.	Yld	Character Description
Depth	No. Sacks	ppg	Ft3/sk	Slurry Description
	390	13.5	1.73	Lead: Class C + 4.0% Bentonite Gel + 0.5% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface)
1,310'	100	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,120' -	750	12.7	2.22	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)
3,120	320	14.8	1.32	Tail: Class C + 10% NaCL + 3% MagOx
16,155'	620	11.0	3.21	Lead: Class C + 3% CaCl2 + 3% Microbond (TOC @ 4,620')
10,155	1330	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 – 1,310'	Fresh - Gel	8.6-8.8	28-34	N/c
1,310' – 5,120'	Brine	8.6-8.8	28-34	N/c
5,120' – 16,155' Lateral	Oil Base	8.8-9.5	58-68	N/c - 6



Dragon 36 State 509H

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.



■ 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.



Dragon 36 State 509H 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 Safety/Carlsbad		(575) 748-9718
Highway Department		(575) 885-3281
New Mexico Oil Conservation		(575) 476-3440
U.S. Dept. of Labor		(575) 887-1174
EOG Resources, Inc.		
EOG / Midland	Office	(432) 686-3600
Company Drilling Consultants:		
David Dominque	Cell	(985) 518-5839
Mike Vann	Cell	(817) 980-5507
Drilling Engineer		
Esteban Del Valle	Cell	(432) 269-7063
Daniel Moose	Cell	(432) 312-2803
Drilling Manager		,
Aj Dach	Office	(432) 686-3751
•	Cell	(817) 480-1167
Drilling Superintendent		
Jason Townsend	Office	(432) 848-9209
	Cell	(210) 776-5131
H&P Drilling		
H&P Drilling	Office	(432) 563-5757
H&P 651 Drilling Rig	Rig	(903) 509-7131
Tiest 051 Britishing rug	Nig	(503) 505 7151
Tool Pusher:	C 11	(017) 7(0 (274
Johnathan Craig	Cell	(817) 760-6374
Brad Garrett		
Safety:		
Brian Chandler (HSE Manager)	Office	(432) 686-3695
	Cell	(817) 239-0251



Midland

Lea County, NM (NAD 83 NME) Dragon 36 State #509H

OH

Plan: Plan #0.1

Standard Planning Report

03 August, 2021



Planning Report

PEDM Database: Company: Midland

Project: Lea County, NM (NAD 83 NME)

Site: Dragon 36 State Well: #509H

Wellbore: OH Plan #0.1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well #509H

KB = 25 @ 3516.0usft KB = 25 @ 3516.0usft

Grid

Minimum Curvature

Project Lea County, NM (NAD 83 NME)

Map System: US State Plane 1983 North American Datum 1983 Geo Datum: New Mexico Eastern Zone Map Zone:

System Datum:

Mean Sea Level

Dragon 36 State Site

Northing: 426,079.00 usft Site Position: 32° 10' 7.510 N Latitude: From: Мар Easting: 793,102.00 usft Longitude: 103° 31' 10.836 W

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

Well #509H

Well Position +N/-S 0.0 usft 426,009.00 usft Latitude: 32° 10' 7.103 N Northing: +E/-W 0.0 usft Easting: 789,249.00 usft Longitude: 103° 31' 55.666 W 0.0 usft Wellhead Elevation: usft **Ground Level:** 3,491.0 usft **Position Uncertainty**

0.43° **Grid Convergence:**

ОН Wellbore

Declination Magnetics **Model Name** Sample Date Dip Angle Field Strength (°) (°) (nT) IGRF2020 8/3/2021 6.51 59.85 47,450.94314149

Plan #0.1 Design

Audit Notes:

PLAN 0.0 Version: Phase: Tie On Depth:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 6.29

Plan Survey Tool Program Date 8/3/2021

16,154.9

Depth From Depth To

0.0

(usft) (usft) Survey (Wellbore) **Tool Name**

Plan #0.1 (OH)

Remarks

MWD + IFR1

Plan Sections Measured Vertical Dogleg Build Turn Depth Inclination Azimuth Depth +N/-S +E/-W Rate Rate Rate TFO (usft) (°) (°) (usft) (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (°) Target 0.0 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00 0.00 1,300.0 0.00 0.00 1,300.0 0.0 0.0 0.00 0.00 0.00 0.00 1,678.8 7.58 138.74 1,677.7 -18.8 16.5 2.00 2.00 0.00 138.74 7,464.9 7.58 138.74 7,413.3 -592.2 519.5 0.00 0.00 0.00 0.00 7,843.7 -611.0 536.0 0.00 0.00 7,791.0 2.00 -2.00 0.00 180.00 10,752.2 10,699.5 536.0 0.00 KOP(Dragon 36 State 0.00 0.00 -611.0 0.00 0.00 0.00 11,502.2 90.00 359.58 11,177.0 -133.6 532.5 12.00 12.00 -0.06 359.58 4,519.0 498.0 0.00 16,154.9 90.00 359.58 11,177.0 0.00 0.00 0.00 PBHL(Dragon 36 Stat

EOG MWD+IFR1

eog resources

Planning Report

Database: PEDM Company: Midland

Project: Lea County, NM (NAD 83 NME)

Site: Dragon 36 State
Well: #509H

Well: #509H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #509H

KB = 25 @ 3516.0usft KB = 25 @ 3516.0usft

Grid

lanned 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
300.0	0.00	0.00	300.0	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	2.00	138.74	1,400.0	-1.3	1.2	-1.2	2.00	2.00	0.00
1,500.0	4.00	138.74	1,499.8	-5.2	4.6	-4.7	2.00	2.00	0.00
1,600.0	6.00	138.74	1,599.5	-11.8	10.3	-10.6	2.00	2.00	0.00
1,678.8	7.58	138.74	1,677.7	-18.8	16.5	-16.9	2.00	2.00	0.00
1,700.0	7.58	138.74	1,698.7	-20.9	18.3	-18.8	0.00	0.00	0.00
1,800.0	7.58	138.74	1,797.8	-30.8	27.0	-27.7	0.00	0.00	0.00
1 000 0	7.58	138.74	1,897.0	-40.7	35.7	-36.6	0.00	0.00	0.00
1,900.0									
2,000.0	7.58	138.74	1,996.1	-50.6	44.4	-45.5	0.00	0.00	0.00
2,100.0	7.58	138.74	2,095.2	-60.5	53.1	-54.4	0.00	0.00	0.00
2,200.0	7.58	138.74	2,194.3	-70.4	61.8	-63.3	0.00	0.00	0.00
2,300.0	7.58	138.74	2,293.5	-80.4	70.5	-72.2	0.00	0.00	0.00
2,400.0	7.58	138.74	2,392.6	-90.3	79.2	-81.1	0.00	0.00	0.00
2,500.0	7.58	138.74	2,491.7	-100.2	87.9	-90.0	0.00	0.00	0.00
2,600.0	7.58	138.74	2,590.9	-110.1	96.6	-98.8	0.00	0.00	0.00
2,700.0	7.58	138.74	2,690.0	-120.0	105.3	-107.7	0.00	0.00	0.00
2,800.0	7.58	138.74	2,789.1	-129.9	114.0	-116.6	0.00	0.00	0.00
	7.00		2,700.1	-120.0		-110.0			
2,900.0	7.58	138.74	2,888.2	-139.8	122.7	-125.5	0.00	0.00	0.00
3,000.0	7.58	138.74	2,987.4	-149.7	131.4	-134.4	0.00	0.00	0.00
3,100.0	7.58	138.74	3,086.5	-159.6	140.0	-143.3	0.00	0.00	0.00
3,200.0	7.58	138.74	3,185.6	-169.5	148.7	-152.2	0.00	0.00	0.00
3,300.0	7.58	138.74	3,284.7	-179.5	157.4	-161.1	0.00	0.00	0.00
3,400.0	7.58	138.74	3,383.9	-189.4	166.1	-170.0	0.00	0.00	0.00
3,500.0	7.58	138.74	3,483.0	-199.3	174.8	-178.9	0.00	0.00	0.00
3,600.0	7.58	138.74	3,582.1	-209.2	183.5	-170.9	0.00	0.00	0.00
3,700.0	7.58	138.74	3,681.3	-219.1	192.2	-196.7	0.00	0.00	0.00
3,800.0	7.58	138.74	3,780.4	-229.0	200.9	-205.6	0.00	0.00	0.00
3,900.0	7.58	138.74	3,879.5	-238.9	209.6	-214.5	0.00	0.00	0.00
4,000.0	7.58	138.74	3,978.6	-248.8	218.3	-223.4	0.00	0.00	0.00
4,100.0	7.58	138.74	4,077.8	-258.7	227.0	-232.3	0.00	0.00	0.00
4,200.0	7.58	138.74	4,176.9	-268.6	235.7	-241.2	0.00	0.00	0.00
4,300.0	7.58	138.74	4,276.0	-278.6	244.4	-250.1	0.00	0.00	0.00
4 400 0	7.50		4.075.4	000 5	050.4	050.0	0.00	0.00	0.00
4,400.0	7.58	138.74	4,375.1	-288.5	253.1	-259.0	0.00	0.00	0.00
4,500.0	7.58	138.74	4,474.3	-298.4	261.8	-267.9	0.00	0.00	0.00
4,600.0	7.58	138.74	4,573.4	-308.3	270.4	-276.8	0.00	0.00	0.00
4,700.0	7.58	138.74	4,672.5	-318.2	279.1	-285.7	0.00	0.00	0.00
4,800.0	7.58	138.74	4,771.7	-328.1	287.8	-294.6	0.00	0.00	0.00
4,900.0	7.58	138.74	4,870.8	-338.0	296.5	-303.5	0.00	0.00	0.00
5,000.0	7.58	138.74	4,969.9	-347.9	305.2	-312.4	0.00	0.00	0.00
5,100.0	7.58	138.74	5,069.0	-357.8	313.9	-321.3	0.00	0.00	0.00
-,	7.58	138.74	5,168.2	-367.7	322.6	-330.2	0.00	0.00	0.00

eog resources

Planning Report

Database: PEDM Company: Midland

Project: Lea County, NM (NAD 83 NME)

Site: Dragon 36 State
Well: #509H

Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:

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Well #509H

KB = 25 @ 3516.0usft KB = 25 @ 3516.0usft

Grid

lanned 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	7.58	138.74	5,267.3	-377.7	331.3	-339.1	0.00	0.00	0.00
5,400.0	7.58	138.74	5,366.4	-387.6	340.0	-348.0	0.00	0.00	0.00
5,500.0	7.58	138.74	5,465.5	-397.5	348.7	-356.9	0.00	0.00	0.00
5,600.0	7.58	138.74	5,564.7	-407.4	357.4	-365.8	0.00	0.00	0.00
5,700.0	7.58	138.74	5,663.8	-417.3	366.1	-374.7	0.00	0.00	0.00
5,800.0	7.58	138.74	5,762.9	-427.2	374.8	-383.6	0.00	0.00	0.00
5,900.0	7.58	138.74	5,862.1	-437.1	383.5	-392.5	0.00	0.00	0.00
6,000.0	7.58	138.74	5,961.2	-447.0	392.2	-401.4	0.00	0.00	0.00
6,100.0	7.58	138.74	6,060.3	-456.9	400.9	-410.3	0.00	0.00	0.00
6,200.0	7.58	138.74	6,159.4	-466.8	409.5	-419.2	0.00	0.00	0.00
6,300.0	7.58	138.74	6,258.6	-476.8	418.2	-428.1	0.00	0.00	0.00
6,400.0	7.58	138.74	6,357.7	-486.7	426.9	-437.0	0.00	0.00	0.00
6,500.0	7.58	138.74	6,456.8	-496.6	435.6	-445.9	0.00	0.00	0.00
6,600.0	7.58	138.74	6,555.9	-506.5	444.3	-454.8	0.00	0.00	0.00
6,700.0	7.58	138.74	6,655.1	-516.4	453.0	-463.7	0.00	0.00	0.00
6,800.0	7.58	138.74	6,754.2	-526.3	461.7	-472.6	0.00	0.00	0.00
6,900.0	7.58	138.74	6,853.3	-536.2	470.4	-481.5	0.00	0.00	0.00
7,000.0	7.58	138.74	6,952.5	-546.1	479.1	-490.4	0.00	0.00	0.00
7,100.0	7.58	138.74	7,051.6	-556.0	487.8	-499.3	0.00	0.00	0.00
7,200.0	7.58	138.74	7,150.7	-565.9	496.5	-508.2	0.00	0.00	0.00
7,300.0	7.58	138.74	7,249.8	-575.9	505.2	-517.1	0.00	0.00	0.00
7,400.0	7.58	138.74	7,349.0	-585.8	513.9	-526.0	0.00	0.00	0.00
7,464.9	7.58	138.74	7,413.3	-592.2	519.5	-531.7	0.00	0.00	0.00
7,500.0	6.87	138.74	7,448.1	-595.5	522.4	-534.7	2.00	-2.00	0.00
7,600.0	4.87	138.74	7,547.6	-603.2	529.2	-541.6	2.00	-2.00	0.00
7,700.0	2.87	138.74	7,647.4	-608.3	533.6	-546.2	2.00	-2.00	0.00
7,800.0	0.87	138.74	7,747.3	-610.7	535.8	-548.4	2.00	-2.00	0.00
7,843.7	0.00	0.00	7,791.0	-611.0	536.0	-548.6	2.00	-2.00	0.00
7,900.0	0.00	0.00	7,847.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,000.0	0.00	0.00	7,947.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,100.0	0.00	0.00	8,047.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,200.0	0.00	0.00	8,147.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,300.0	0.00	0.00	8,247.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,400.0	0.00	0.00	8,347.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,500.0	0.00	0.00	8,447.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,600.0	0.00	0.00	8,547.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,700.0	0.00	0.00	8,647.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,800.0	0.00	0.00	8,747.3	-611.0	536.0	-548.6	0.00	0.00	0.00
8,900.0	0.00	0.00	8,847.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,000.0	0.00	0.00	8,947.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,100.0	0.00	0.00	9,047.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,200.0	0.00	0.00	9,147.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,300.0	0.00	0.00	9,247.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,400.0	0.00	0.00	9,347.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,500.0	0.00	0.00	9,447.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,600.0	0.00	0.00	9,547.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,700.0	0.00	0.00	9,647.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,800.0	0.00	0.00	9,747.3	-611.0	536.0	-548.6	0.00	0.00	0.00
9,900.0	0.00	0.00	9,847.3	-611.0	536.0	-548.6	0.00	0.00	0.00
10,000.0	0.00	0.00	9,947.3	-611.0	536.0	-548.6	0.00	0.00	0.00
10,100.0	0.00	0.00	10,047.3	-611.0	536.0	-548.6	0.00	0.00	0.00
10,200.0	0.00	0.00	10,147.3	-611.0	536.0	-548.6	0.00	0.00	0.00
10,300.0	0.00	0.00	10,247.3	-611.0	536.0	-548.6	0.00	0.00	0.00
10,400.0	0.00	0.00	10,347.3	-611.0	536.0	-548.6	0.00	0.00	0.00

beog resources

Planning Report

Database: PEDM Company: Midland

Design:

Project: Lea County, NM (NAD 83 NME)

Plan #0.1

 Site:
 Dragon 3

 Well:
 #509H

 Wellbore:
 OH

Lea County, NM (NAD 83 NME) Dragon 36 State Local Co-ordinate Reference: TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well #509H

KB = 25 @ 3516.0usft KB = 25 @ 3516.0usft

Grid

esign:		Plan #0.1								
Planned	d Survey									
iumice	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)
	10,500.0	0.00	0.00	10,447.3	-611.0	536.0	-548.6	0.00	0.00	0.00
	10,600.0	0.00	0.00	10,547.3	-611.0	536.0	-548.6	0.00	0.00	0.00
	10,700.0 10,752.2	0.00 0.00	0.00 0.00	10,647.3 10,699.5	-611.0 -611.0	536.0 536.0	-548.6 -548.6	0.00 0.00	0.00 0.00	0.00 0.00
		36 State #509H)		.0,000.0	01110	000.0	0.0.0	0.00	0.00	0.00
	10,775.0	2.74	359.58	10,722.3	-610.5	536.0	-548.1	12.00	12.00	0.00
	10,800.0	5.74	359.58	10,747.2	-608.6	536.0	-546.2	12.00	12.00	0.00
	10,825.0	8.74	359.58	10,772.0	-605.5	536.0	-543.1	12.00	12.00	0.00
	10,850.0	11.74	359.58	10,796.6	-601.0	535.9	-538.7	12.00	12.00	0.00
	10,875.0	14.74	359.58	10,820.9	-595.3	535.9	-533.0	12.00	12.00	0.00
	10,900.0	17.74	359.58	10,844.9	-588.3	535.8	-526.1	12.00	12.00	0.00
	10,925.0	20.74	359.58	10,868.5	-580.1	535.8	-517.9	12.00	12.00	0.00
	10,950.0	23.74	359.58	10,891.7	-570.6	535.7	-508.5	12.00	12.00	0.00
	10,975.0	26.74	359.58	10,914.3	-560.0	535.6	-497.9	12.00	12.00	0.00
	11,000.0	29.74	359.58	10,936.3	-548.1	535.5	-486.2	12.00	12.00	0.00
	11,025.0	32.74	359.58	10,957.7	-535.2	535.4	-473.3	12.00	12.00	0.00
	11,050.0	35.74	359.58	10,978.4	-521.1	535.3	-459.3	12.00	12.00	0.00
	11,075.0	38.74	359.58	10,998.3	-506.0	535.2	-444.3	12.00	12.00	0.00
	11,100.0	41.74	359.58	11,017.3	-489.8	535.1	-428.3	12.00	12.00	0.00
	11,125.0	44.74	359.58	11,035.6	-472.7	535.0	-411.3	12.00	12.00	0.00
	11,150.0	47.74	359.58	11,052.8	-454.7	534.8	-393.3	12.00	12.00	0.00
	11,150.5	47.80	359.58	11,053.2	-454.3	534.8	-393.0	12.00	12.00	0.00
	FTP(Dragon	36 State #509H)								
	11,175.0	50.74	359.58	11,069.2	-435.7	534.7	-374.5	12.00	12.00	0.00
	11,200.0	53.74	359.58	11,084.5	-416.0	534.6	-354.9	12.00	12.00	0.00
	11,225.0	56.74	359.58	11,098.7	-395.4	534.4	-334.5	12.00	12.00	0.00
	11,250.0	59.74	359.58	11,111.9	-374.2	534.2	-313.4	12.00	12.00	0.00
	11,275.0	62.74	359.58	11,123.9	-352.3	534.1	-291.6	12.00	12.00	0.00
	11,300.0	65.74	359.58	11,134.8	-329.8	533.9	-269.3	12.00	12.00	0.00
	11,325.0	68.74	359.58	11,144.5	-306.7	533.7	-246.4	12.00	12.00	0.00
	11,350.0	71.74	359.58	11,152.9	-283.2	533.6	-223.0	12.00	12.00	0.00
	11,375.0	74.74	359.58	11,160.1	-259.2	533.4	-199.3	12.00	12.00	0.00
	11,400.0	77.74	359.58	11,166.1	-235.0	533.2	-175.1	12.00	12.00	0.00
	11,425.0	80.74	359.58	11,170.7	-210.4	533.0	-150.8	12.00	12.00	0.00
	11,450.0	83.74	359.58	11,174.1	-185.6	532.8	-126.2	12.00	12.00	0.00
	11,475.0	86.74	359.58	11,176.2	-160.7	532.7	-101.4	12.00	12.00	0.00
	11,502.2	90.00	359.58	11,177.0	-133.6	532.5	-74.4	12.00	12.00	0.00
	11,600.0	90.00	359.58	11,177.0	-35.8	531.7	22.7	0.00	0.00	0.00
	11,700.0	90.00	359.58	11,177.0	64.2	531.0	122.0	0.00	0.00	0.00
	11,800.0	90.00	359.58	11,177.0	164.2	530.3	221.3	0.00	0.00	0.00
	11,900.0	90.00	359.58	11,177.0	264.2	529.5	320.6	0.00	0.00	0.00
	12,000.0	90.00	359.58	11,177.0	364.2	528.8	420.0	0.00	0.00	0.00
	12,100.0	90.00	359.58	11,177.0	464.2	528.0	519.3	0.00	0.00	0.00
	12,200.0	90.00	359.58	11,177.0	564.2	527.3	618.6	0.00	0.00	0.00
	12,300.0	90.00	359.58	11,177.0	664.2	526.6	717.9	0.00	0.00	0.00
	12,400.0	90.00	359.58	11,177.0	764.2	525.8	817.2	0.00	0.00	0.00
	12,500.0	90.00	359.58	11,177.0	864.2	525.1	916.5	0.00	0.00	0.00
	12,600.0	90.00	359.58	11,177.0	964.2	524.3	1,015.9	0.00	0.00	0.00
	12,700.0	90.00	359.58	11,177.0	1,064.2	523.6	1,115.2	0.00	0.00	0.00
	12,800.0	90.00	359.58	11,177.0	1,164.2	522.9	1,214.5	0.00	0.00	0.00
	12,900.0	90.00	359.58	11,177.0	1,264.2	522.1	1,313.8	0.00	0.00	0.00
	13,000.0	90.00	359.58	11,177.0	1,364.2	521.4	1,413.1	0.00	0.00	0.00
	13,100.0	90.00	359.58	11,177.0	1,464.2	520.6	1,512.4	0.00	0.00	0.00
	13,200.0	90.00	359.58	11,177.0	1,564.2	519.9	1,611.7	0.00	0.00	0.00



Planning Report

Database: PEDM Company: Midland

Project: Lea County, NM (NAD 83 NME)

Site: Dragon 36 State
Well: #509H

Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well #509H

KB = 25 @ 3516.0usft KB = 25 @ 3516.0usft

Grid

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
13,300.0	90.00	359.58	11,177.0	1,664.2	519.1	1,711.1	0.00	0.00	0.00
13,400.0	90.00	359.58	11,177.0	1,764.2	518.4	1,810.4	0.00	0.00	0.00
13,500.0	90.00	359.58	11,177.0	1,864.2	517.7	1,909.7	0.00	0.00	0.00
13,600.0	90.00	359.58	11,177.0	1,964.2	516.9	2,009.0	0.00	0.00	0.00
13,700.0	90.00	359.58	11,177.0	2,064.2	516.2	2,108.3	0.00	0.00	0.00
13,800.0	90.00	359.58	11,177.0	2,164.2	515.4	2,207.6	0.00	0.00	0.00
13,900.0	90.00	359.58	11,177.0	2,264.2	514.7	2,306.9	0.00	0.00	0.00
14,000.0	90.00	359.58	11,177.0	2,364.2	514.0	2,406.3	0.00	0.00	0.00
14,100.0	90.00	359.58	11,177.0	2,464.2	513.2	2,505.6	0.00	0.00	0.00
14,200.0	90.00	359.58	11,177.0	2,564.2	512.5	2,604.9	0.00	0.00	0.00
14,300.0	90.00	359.58	11,177.0	2,664.2	511.7	2,704.2	0.00	0.00	0.00
14,400.0	90.00	359.58	11,177.0	2,764.2	511.0	2,803.5	0.00	0.00	0.00
14,500.0	90.00	359.58	11,177.0	2,864.2	510.3	2,902.8	0.00	0.00	0.00
14,600.0	90.00	359.58	11,177.0	2,964.2	509.5	3,002.1	0.00	0.00	0.00
14,700.0	90.00	359.58	11,177.0	3,064.2	508.8	3,101.5	0.00	0.00	0.00
14,800.0	90.00	359.58	11,177.0	3,164.2	508.0	3,200.8	0.00	0.00	0.00
14,900.0	90.00	359.58	11,177.0	3,264.2	507.3	3,300.1	0.00	0.00	0.00
15,000.0	90.00	359.58	11,177.0	3,364.2	506.6	3,399.4	0.00	0.00	0.00
15,100.0	90.00	359.58	11,177.0	3,464.1	505.8	3,498.7	0.00	0.00	0.00
15,200.0	90.00	359.58	11,177.0	3,564.1	505.1	3,598.0	0.00	0.00	0.00
15,300.0	90.00	359.58	11,177.0	3,664.1	504.3	3,697.3	0.00	0.00	0.00
15,400.0	90.00	359.58	11,177.0	3,764.1	503.6	3,796.7	0.00	0.00	0.00
15,500.0	90.00	359.58	11,177.0	3,864.1	502.9	3,896.0	0.00	0.00	0.00
15,600.0	90.00	359.58	11,177.0	3,964.1	502.1	3,995.3	0.00	0.00	0.00
15,700.0	90.00	359.58	11,177.0	4,064.1	501.4	4,094.6	0.00	0.00	0.00
15,800.0	90.00	359.58	11,177.0	4,164.1	500.6	4,193.9	0.00	0.00	0.00
15,900.0	90.00	359.58	11,177.0	4,264.1	499.9	4,293.2	0.00	0.00	0.00
16,000.0	90.00	359.58	11,177.0	4,364.1	499.1	4,392.5	0.00	0.00	0.00
16,100.0	90.00	359.58	11,177.0	4,464.1	498.4	4,491.9	0.00	0.00	0.00
16,154.9	90.00	359.58	11,177.0	4,519.0	498.0	4,546.4	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(Dragon 36 State #! - plan hits target cent - Point	0.00 er	0.00	10,699.5	-611.0	536.0	425,398.00	789,785.00	32° 10' 1.018 N	103° 31' 49.484 W
PBHL(Dragon 36 State # - plan hits target cent - Point	0.00 er	0.00	11,177.0	4,519.0	498.0	430,528.00	789,747.00	32° 10' 51.783 N	103° 31' 49.480 W
FTP(Dragon 36 State #5 - plan misses target of point	0.00 center by 163	0.00 5usft at 1115	11,177.0 50.5usft MD	-561.0 (11053.2 TVD,	536.0 , -454.3 N, 53	425,448.00 4.8 E)	789,785.00	32° 10' 1.512 N	103° 31' 49.479 W



Azimuths to Grid North True North: -0.43° Magnetic North: 6.08°

> **Magnetic Field** Strength: 47450.9nT Dip Angle: 59.85° Date: 8/3/2021 Model: IGRF2020

To convert a Magnetic Direction to a Grid Direction, Add 6.08° To convert a Magnetic Direction to a True Direction, Add 6.51° East To convert a True Direction to a Grid Direction, Subtract 0.43°

Lea County, NM (NAD 83 NME)

Dragon 36 State

#509H

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: #509H

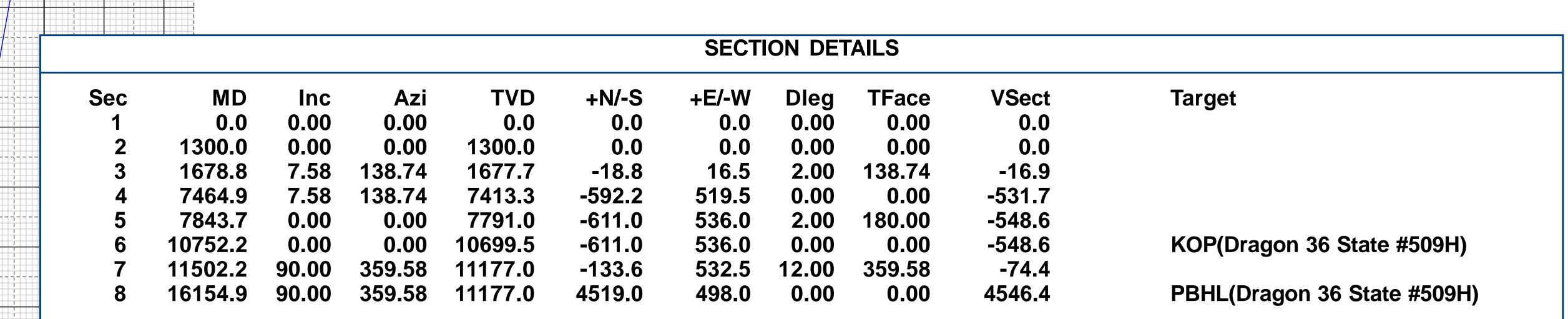
3491.0

32° 10' 7.103 N

KB = 25 @ 3516.0usft Northing **Easting** Latittude 426009.00

789249.00

Longitude 103° 31' 55.666 W



2600

2800

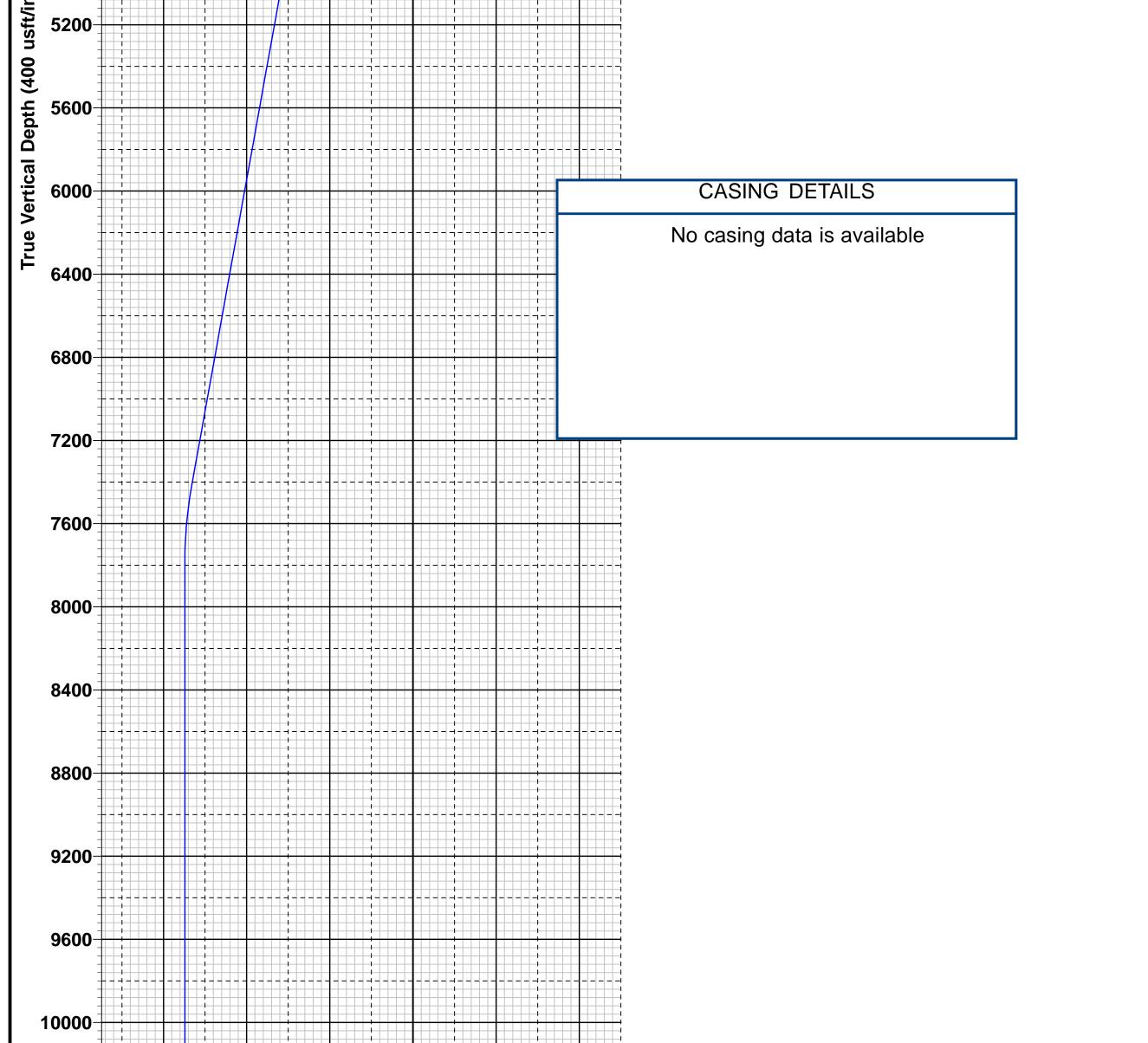
3000

3200

3400

3600

2400



1200

1400

1800

2000

Vertical Section at 6.29° (200 usft/in)

KOP(Dragon 36 State #509H)

200

400

600

-200

1200

2400

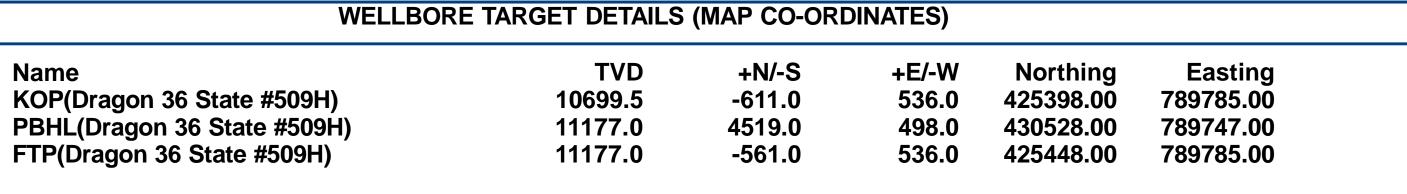
2800

10400

10800

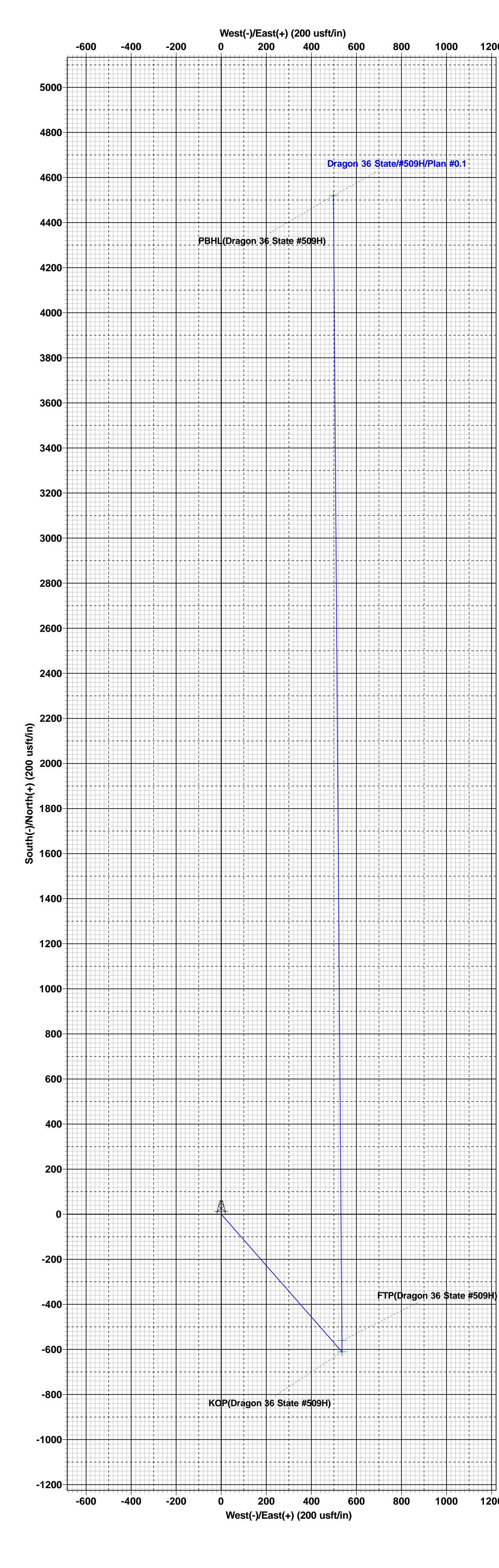
11200

Released to Imaging: 10/20/2021 4:37:32 PM



PBHL(Dragon 36 State #509H)

4000



Lea County, NM (NAD 83 NME) Dragon 36 State

9:13, August 03 2021

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 Effective May 25, 2021

I Omanatani EOC	Deserves Inc	OCDII). 7277		D.	.40. 00/0	2 /202	1
I. Operator:EOC	Resources, Inc	cOGRIL): /3//		Da	ite: 08/0	3 /202	l
II. Type: ⊠ Origin Other.	al 🗆 Amendm	ent due to ☐ 19.15.	.27.9.D(6)(a) NN	ИАС □ 19.15.27.	9.D(6)(ł) NMAC	! □	
If Other, please describ	e:							
III. Well(s): Provide to be recompleted from a					wells pr	oposed to	be dri	lled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D		cipated MCF/D		Anticipated roduced Water BBL/D
Dragon 36 State 509H		M-36-24S-33E	664' FSL & 758' FWL	+/- 1000	+/- 35	500	+/- 30	000
IV. Central Delivery V. Anticipated Scheo or proposed to be recon	lule: Provide th	e following informations in gle well pad or c	ation for each ne	ew or recompleted entral delivery poi	l well or nt.	set of we	lls proj	posed to be drilled
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		Initial I Back I		First Production Date
Dragon 36 State 509H		8/16/21	8/31/21	10/1/21		11/1/21		12/1/21
VII. Operational Pra Subsection A through I VIII. Best Manageme during active and plant	ctices: ⊠ Attac F of 19.15.27.8 ent Practices: □	ch a complete descr NMAC. ⊠ Attach a comple	ription of the act	tions Operator wi	ll take t	o comply	with the	he requirements of

Section 2 Enhanced Plan

			E APRIL 1, 2022				
Beginning April 1, 2 reporting area must c			with its statewide natural g	as capture re	quirement for the applicable		
☐ Operator certifies capture requirement	-	-	tion because Operator is in o	compliance v	with its statewide natural gas		
IX. Anticipated Nat	tural Gas Producti	ion:					
Well		API	Anticipated Average Natural Gas Rate MCF/D		cipated Volume of Natural s for the First Year MCF		
X. Natural Gas Gat	hering System (NO	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 in the segment of the s	s to the existing or on of the natural gas gas. The natural gas gas rom the well prior to the operator does a system(s) describe	planned interconnect of the gathering system(s) to whathering system will to the date of first product does not anticipate the data above will continue to	he natural gas gathering systewhich the well(s) will be consisted will not have capacity to go tion.	em(s), and the nected. ather 100% of the same of the	beline route(s) connecting the the maximum daily capacity of the anticipated natural gas the segment, or portion, of the the caused by the new well(s).		
Section 2 as provided	d in Paragraph (2) o		27.9 NMAC, and attaches a f		the information provided in on of the specific information		

(h)

(i)

Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after 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, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or ☐ Operator will not be able to connect 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, taking into 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. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan.

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) **(b)** power generation for grid; (c) compression on lease; (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** 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.

Signature: Star L Harrell
Printed Name: Star L Harrell
Title: Sr Regulatory Specialist
E-mail Address: Star_Harrell@eogresources.com
Date: 8/3/2021
Phone: (432) 848-9161
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

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.

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

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**

CONDITIONS

Action 49278

CONDITIONS

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	49278
	Action Type:
	[UF-NSL] Non-Standard Location (NSL)

CONDITIONS

Created By	Condition	Condition Date
llowe	None	9/21/2021