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 323720

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

1. Operator Name and Address	2. OGRID Number
CROSS TIMBERS ENERGY, LLC 400 West 7th Street Fort Worth, TX 76102	298299
	3. API Number 30-025-50726

4. Property Code	5. Property Name	6. Well No.
312479	NORTH VACUUM ABO UNIT	312

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	26	17S	34E	E	2629	N	1314	W	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	26	17S	34E	E	2627	N	1314	W	Lea

9. Pool Information

VACUUM;ABO, NORTH	61760

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	4029
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	9821	Abo		9/5/2022
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	1579	682	0
Prod	8.75	5.5	17	9821	1639	0

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	SHAFFER

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 ☐ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Amy Byars	Approved By:	Paul F Kautz
Title:	Supervisor, Regulatory Compliance	Title:	Geologist
Email Address:	abyars@mspartners.com	Approved Date:	10/11/2022 Expiration Date: 10/11/2024
Date:	8/19/2022 Phone: 817-334-8096	Conditions of Approval Attached	

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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, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-50726	61760	VACUUM; ABO, NORTH

Property Code	Property Name	Well Number
312479	NORTH VACUUM ABO UNIT	312

OGRID No.	Operator Name	Elevation
298299	CROSS TIMBERS ENERGY, LLC	4029'

Surface Location

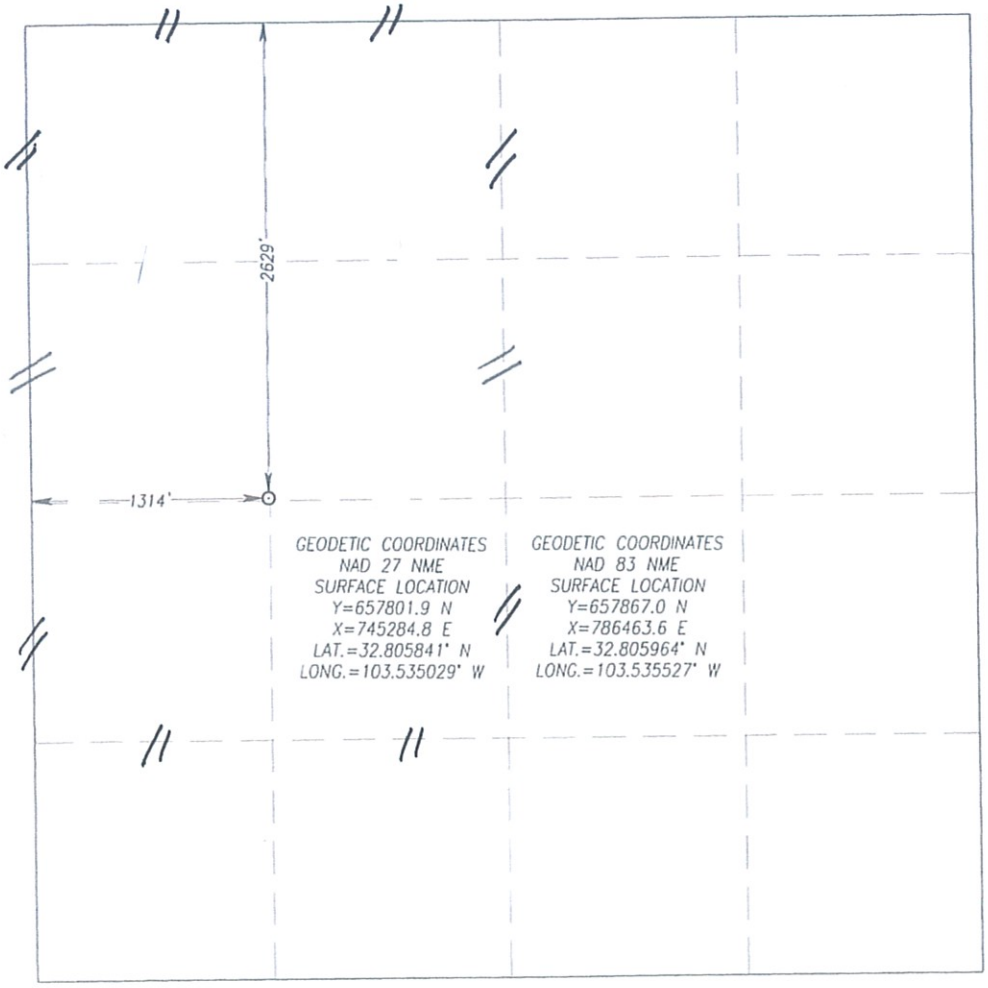
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	26	17-S	34-E		2629	NORTH	1314	WEST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order 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



OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Connie Blaylock
Signature Date

Connie Blaylock
Printed Name

cblaylock@mspartners.com
E-mail Address

SURVEYOR 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 and correct to the best of my belief.

AUGUST 08, 2022
Date of Survey

Signature & Seal of Professional Surveyor

RONALD J. EIDSON
NEW MEXICO
3239
REGISTERED PROFESSIONAL SURVEYOR

Ronald J Eidson 08/17/2022

Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239

ACK JWSC W.O.: 22.11.0320

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

Form APD Comments

Permit 323720

PERMIT COMMENTS

Operator Name and Address:	API Number:
CROSS TIMBERS ENERGY, LLC [298299] 400 West 7th Street Fort Worth, TX 76102	30-025-50726
	Well: NORTH VACUUM ABO UNIT #312

Created By	Comment	Comment Date
cblaylock	Other Operators in same Qtr-Qtr have not been notified because wells are plugged.	8/19/2022
pkautz	HOLD OPERATOR IS OUT OF COMPLIANCE WITH INACTIVE WELLS	9/1/2022

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Conditions

Permit 323720

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
CROSS TIMBERS ENERGY, LLC [298299] 400 West 7th Street Fort Worth, TX 76102	30-025-50726
	Well: NORTH VACUUM ABO UNIT #312

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
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	Cement is required to circulate on both surface and production strings of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
pkautz	REQUIRED TO FILE DEVIATION SURVEY WITH C-104

Cross Timber Energy, LLC

Lea County, NM
NVAU #306
NVAU #306

Wellbore #1

Plan: Plan #1

Standard Planning Report - Geographic

18 August, 2022

Patriot Drilling Services

Planning Report - Geographic

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well NVAU #306
Company:	Cross Timber Energy, LLC	**TVD Reference:**	KB @ 4026.00usft
Project:	Lea County, NM	**MD Reference:**	KB @ 4026.00usft
Site:	NVAU #306	**North Reference:**	Grid
Well:	NVAU #306	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project Lea County, NM

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site NVAU #306

Site Position:		**Northing:**	658,021.00 usft	**Latitude:**	32.80646766
From:	Map	**Easting:**	744,111.60 usft	**Longitude:**	-103.53884124
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.43 °

Well NVAU #306

Well Position	**+N/-S**	0.00 usft	**Northing:**	658,021.00 usft	**Latitude:**	32.80646766
	+E/-W	0.00 usft	**Easting:**	744,111.60 usft	**Longitude:**	-103.53884124
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	4,014.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/18/2022	6.44	60.39	47,713.92792899

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	205.27

Plan Survey Tool Program **Date** 8/18/2022

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	9,696.44	Plan #1 (Wellbore #1)	MWD+IGRF OWSG MWD + IGRF or WMM	

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,776.00	0.00	0.00	1,776.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,984.31	4.17	205.27	1,984.13	-6.85	-3.23	2.00	2.00	0.00	205.27	
5,794.12	4.17	205.27	5,783.87	-257.15	-121.37	0.00	0.00	0.00	0.00	
6,002.43	0.00	0.00	5,992.00	-264.00	-124.60	2.00	-2.00	0.00	180.00	VP (NVAU #306)
9,696.44	0.00	0.00	9,686.00	-264.00	-124.60	0.00	0.00	0.00	0.00	

Patriot Drilling Services

Planning Report - Geographic

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well NVAU #306
Company:	Cross Timber Energy, LLC	**TVD Reference:**	KB @ 4026.00usft
Project:	Lea County, NM	**MD Reference:**	KB @ 4026.00usft
Site:	NVAU #306	**North Reference:**	Grid
Well:	NVAU #306	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
100.00	0.00	0.00	100.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
200.00	0.00	0.00	200.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
300.00	0.00	0.00	300.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
400.00	0.00	0.00	400.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
500.00	0.00	0.00	500.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
600.00	0.00	0.00	600.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
700.00	0.00	0.00	700.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
800.00	0.00	0.00	800.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
900.00	0.00	0.00	900.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,000.00	0.00	0.00	1,000.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,100.00	0.00	0.00	1,100.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,200.00	0.00	0.00	1,200.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,300.00	0.00	0.00	1,300.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,400.00	0.00	0.00	1,400.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,500.00	0.00	0.00	1,500.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,526.00	0.00	0.00	1,526.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
Rustler									
1,600.00	0.00	0.00	1,600.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,700.00	0.00	0.00	1,700.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
1,776.00	0.00	0.00	1,776.00	0.00	0.00	658,021.00	744,111.60	32.80646766	-103.53884124
KOP - Start Build @ 2°/100'									
1,800.00	0.48	205.27	1,800.00	-0.09	-0.04	658,020.91	744,111.55	32.80646741	-103.53884138
1,900.00	2.48	205.27	1,899.96	-2.43	-1.15	658,018.58	744,110.45	32.80646102	-103.53884503
1,984.31	4.17	205.27	1,984.13	-6.85	-3.23	658,014.16	744,108.37	32.80644891	-103.53885192
EOB @ 1984.31' MD, 1984.13' TVD, 4.17° INC									
2,000.00	4.17	205.27	1,999.78	-7.88	-3.72	658,013.13	744,107.88	32.80644609	-103.53885353
2,100.00	4.17	205.27	2,099.51	-14.45	-6.82	658,006.56	744,104.78	32.80642810	-103.53886378
2,200.00	4.17	205.27	2,199.25	-21.02	-9.92	657,999.99	744,101.68	32.80641010	-103.53887403
2,300.00	4.17	205.27	2,298.98	-27.59	-13.02	657,993.42	744,098.58	32.80639211	-103.53888429
2,400.00	4.17	205.27	2,398.72	-34.16	-16.12	657,986.85	744,095.48	32.80637412	-103.53889454
2,500.00	4.17	205.27	2,498.45	-40.73	-19.22	657,980.28	744,092.37	32.80635612	-103.53890479
2,600.00	4.17	205.27	2,598.19	-47.30	-22.32	657,973.71	744,089.27	32.80633813	-103.53891504
2,700.00	4.17	205.27	2,697.93	-53.87	-25.42	657,967.14	744,086.17	32.80632013	-103.53892529
2,800.00	4.17	205.27	2,797.66	-60.44	-28.52	657,960.57	744,083.07	32.80630214	-103.53893555
2,803.35	4.17	205.27	2,801.00	-60.66	-28.63	657,960.35	744,082.97	32.80630154	-103.53893589
Yates									
2,900.00	4.17	205.27	2,897.40	-67.01	-31.63	657,954.00	744,079.97	32.80628415	-103.53894580
3,000.00	4.17	205.27	2,997.13	-73.58	-34.73	657,947.43	744,076.87	32.80626615	-103.53895605
3,100.00	4.17	205.27	3,096.87	-80.15	-37.83	657,940.86	744,073.77	32.80624816	-103.53896630
3,137.23	4.17	205.27	3,134.00	-82.59	-38.98	657,938.41	744,072.61	32.80624146	-103.53897012
Seven Rivers									
3,200.00	4.17	205.27	3,196.60	-86.72	-40.93	657,934.29	744,070.67	32.80623017	-103.53897655
3,300.00	4.17	205.27	3,296.34	-93.29	-44.03	657,927.72	744,067.57	32.80621217	-103.53898681
3,400.00	4.17	205.27	3,396.08	-99.86	-47.13	657,921.15	744,064.47	32.80619418	-103.53899706
3,500.00	4.17	205.27	3,495.81	-106.43	-50.23	657,914.58	744,061.37	32.80617619	-103.53900731
3,600.00	4.17	205.27	3,595.55	-113.00	-53.33	657,908.01	744,058.26	32.80615819	-103.53901756
3,700.00	4.17	205.27	3,695.28	-119.57	-56.43	657,901.44	744,055.16	32.80614020	-103.53902781
3,731.80	4.17	205.27	3,727.00	-121.66	-57.42	657,899.35	744,054.18	32.80613448	-103.53903107
Queen									
3,800.00	4.17	205.27	3,795.02	-126.14	-59.53	657,894.87	744,052.06	32.80612220	-103.53903807
3,900.00	4.17	205.27	3,894.75	-132.71	-62.63	657,888.30	744,048.96	32.80610421	-103.53904832
4,000.00	4.17	205.27	3,994.49	-139.28	-65.74	657,881.73	744,045.86	32.80608622	-103.53905857

Patriot Drilling Services

Planning Report - Geographic

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well NVAU #306
Company:	Cross Timber Energy, LLC	**TVD Reference:**	KB @ 4026.00usft
Project:	Lea County, NM	**MD Reference:**	KB @ 4026.00usft
Site:	NVAU #306	**North Reference:**	Grid
Well:	NVAU #306	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,079.72	4.17	205.27	4,074.00	-144.52	-68.21	657,876.49	744,043.39	32.80607187	-103.53906674
Grayburg									
4,100.00	4.17	205.27	4,094.23	-145.85	-68.84	657,875.16	744,042.76	32.80606822	-103.53906882
4,200.00	4.17	205.27	4,193.96	-152.42	-71.94	657,868.59	744,039.66	32.80605023	-103.53907907
4,300.00	4.17	205.27	4,293.70	-158.99	-75.04	657,862.02	744,036.56	32.80603224	-103.53908933
4,400.00	4.17	205.27	4,393.43	-165.56	-78.14	657,855.45	744,033.46	32.80601424	-103.53909958
4,468.75	4.17	205.27	4,462.00	-170.08	-80.27	657,850.93	744,031.33	32.80600187	-103.53910663
San Andres									
4,500.00	4.17	205.27	4,493.17	-172.13	-81.24	657,848.88	744,030.36	32.80599625	-103.53910983
4,600.00	4.17	205.27	4,592.90	-178.70	-84.34	657,842.31	744,027.26	32.80597825	-103.53912008
4,700.00	4.17	205.27	4,692.64	-185.27	-87.44	657,835.74	744,024.16	32.80596026	-103.53913033
4,800.00	4.17	205.27	4,792.38	-191.84	-90.54	657,829.17	744,021.05	32.80594227	-103.53914059
4,900.00	4.17	205.27	4,892.11	-198.41	-93.64	657,822.60	744,017.95	32.80592427	-103.53915084
5,000.00	4.17	205.27	4,991.85	-204.98	-96.74	657,816.03	744,014.85	32.80590628	-103.53916109
5,100.00	4.17	205.27	5,091.58	-211.55	-99.84	657,809.46	744,011.75	32.80588829	-103.53917134
5,200.00	4.17	205.27	5,191.32	-218.12	-102.95	657,802.89	744,008.65	32.80587029	-103.53918159
5,300.00	4.17	205.27	5,291.05	-224.69	-106.05	657,796.32	744,005.55	32.80585230	-103.53919184
5,400.00	4.17	205.27	5,390.79	-231.26	-109.15	657,789.75	744,002.45	32.80583431	-103.53920210
5,500.00	4.17	205.27	5,490.53	-237.83	-112.25	657,783.17	743,999.35	32.80581631	-103.53921235
5,600.00	4.17	205.27	5,590.26	-244.40	-115.35	657,776.60	743,996.25	32.80579832	-103.53922260
5,700.00	4.17	205.27	5,690.00	-250.97	-118.45	657,770.03	743,993.15	32.80578032	-103.53923285
5,794.12	4.17	205.27	5,783.87	-257.15	-121.37	657,763.85	743,990.23	32.80576339	-103.53924250
Start Drop @ 2°/100'									
5,800.00	4.05	205.27	5,789.73	-257.53	-121.55	657,763.47	743,990.05	32.80576235	-103.53924310
5,900.00	2.05	205.27	5,889.59	-262.34	-123.82	657,758.66	743,987.78	32.80574917	-103.53925060
6,000.00	0.05	205.27	5,989.57	-264.00	-124.60	657,757.01	743,987.00	32.80574464	-103.53925318
6,002.43	0.00	0.00	5,992.00	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
EOD @ 6002.43' MD, 5992.00' TVD, 0.00° INC - Glorietta - VP (NVAU #306)									
6,100.00	0.00	0.00	6,089.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
6,200.00	0.00	0.00	6,189.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
6,300.00	0.00	0.00	6,289.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
6,400.00	0.00	0.00	6,389.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
6,500.00	0.00	0.00	6,489.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
6,600.00	0.00	0.00	6,589.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
6,700.00	0.00	0.00	6,689.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
6,800.00	0.00	0.00	6,789.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
6,900.00	0.00	0.00	6,889.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,000.00	0.00	0.00	6,989.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,100.00	0.00	0.00	7,089.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,200.00	0.00	0.00	7,189.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,300.00	0.00	0.00	7,289.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,400.00	0.00	0.00	7,389.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,500.00	0.00	0.00	7,489.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,600.00	0.00	0.00	7,589.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,700.00	0.00	0.00	7,689.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,800.00	0.00	0.00	7,789.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
7,900.00	0.00	0.00	7,889.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,000.00	0.00	0.00	7,989.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,100.00	0.00	0.00	8,089.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,103.43	0.00	0.00	8,093.00	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
Abo									
8,200.00	0.00	0.00	8,189.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,300.00	0.00	0.00	8,289.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,400.00	0.00	0.00	8,389.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318

Patriot Drilling Services

Planning Report - Geographic

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well NVAU #306
Company:	Cross Timber Energy, LLC	**TVD Reference:**	KB @ 4026.00usft
Project:	Lea County, NM	**MD Reference:**	KB @ 4026.00usft
Site:	NVAU #306	**North Reference:**	Grid
Well:	NVAU #306	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,500.00	0.00	0.00	8,489.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,511.43	0.00	0.00	8,501.00	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
***Abo Pay**									
8,600.00	0.00	0.00	8,589.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,700.00	0.00	0.00	8,689.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,800.00	0.00	0.00	8,789.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
8,900.00	0.00	0.00	8,889.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
9,000.00	0.00	0.00	8,989.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
9,100.00	0.00	0.00	9,089.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
9,200.00	0.00	0.00	9,189.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
9,300.00	0.00	0.00	9,289.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
9,400.00	0.00	0.00	9,389.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
9,496.43	0.00	0.00	9,486.00	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
Wolfcamp									
9,500.00	0.00	0.00	9,489.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
9,600.00	0.00	0.00	9,589.57	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
9,696.43	0.00	0.00	9,686.00	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
TD @ 9696.43' MD, 9686.00' TVD - PBHL (NVAU #306)									

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
VP (NVAU #306) - plan hits target center - Point	0.00	0.00	5,992.00	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318
PBHL (NVAU #306) - plan hits target center - Point	0.00	0.00	9,686.00	-264.00	-124.60	657,757.00	743,987.00	32.80574464	-103.53925318

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,576.00	1,576.00	9 5/8"	9-5/8	12-1/4
9,696.44	9,686.00	5 1/2"	5-1/2	6

Patriot Drilling Services

Planning Report - Geographic

Database:	EDM 5000.15 Single User Db	**Local Co-ordinate Reference:**	Well NVAU #306
Company:	Cross Timber Energy, LLC	**TVD Reference:**	KB @ 4026.00usft
Project:	Lea County, NM	**MD Reference:**	KB @ 4026.00usft
Site:	NVAU #306	**North Reference:**	Grid
Well:	NVAU #306	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,526.00	1,526.00	Rustler			
2,803.35	2,801.00	Yates			
3,137.23	3,134.00	Seven Rivers			
3,731.80	3,727.00	Queen			
4,079.72	4,074.00	Grayburg			
4,468.75	4,462.00	San Andres			
6,002.43	5,992.00	Glorietta			
8,103.43	8,093.00	Abo			
8,511.43	8,501.00	*Abo Pay			
9,496.43	9,486.00	Wolfcamp			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,776.00	1,776.00	0.00	0.00	KOP - Start Build @ 2°/100'
1,984.31	1,984.13	-6.85	-3.23	EOB @ 1984.31' MD, 1984.13' TVD, 4.17° INC
5,794.12	5,783.87	-257.15	-121.37	Start Drop @ 2°/100'
6,002.43	5,992.00	-264.00	-124.60	EOD @ 6002.43' MD, 5992.00' TVD, 0.00° INC
9,696.44	9,686.00	-264.00	-124.60	TD @ 9696.43' MD, 9686.00' TVD

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. Operator: CROSS TIMBERS ENERGY, LLC **OGRID:** 298299 **Date:** 08/18/2022

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
NVAU 312		E 26 17S 34E	2629 FNL	80	60	150
			1314 FWL			

IV. Central Delivery Point Name: NVAU 95 BATTERY [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
NVAU 312		09/05/2022	09/15/2022	09/20/2022	09/27/2022	09/30/2022

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

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:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

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

(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:	Connie Blaylock
Printed Name:	Connie Blaylock
Title:	Regulatory Analyst
E-mail Address:	cblaylock@mspartners.com
Date:	08/18/2022
Phone:	817-334-7882

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

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

Surface facilities for the well are located at central batteries. Process equipment at the battery includes a 3 phase separator, a 2 phase heater treater, water and oil tanks, and a flare stack. Vessels are sized based on historical and predicted well performance and provide adequate time for separation. Natural gas will be sold to the sales pipeline and vented/flared during emergency/non-scheduled issues.

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

- Drilling Operations: Any natural gas produced during drilling operations will be combusted with a flare line. A properly sized flare stack will be located a minimum of 100 feet from the nearest surface hole location. If flaring isn't possible or poses a risk, Operator will vent natural gas to avoid any safety or environmental risks and report natural gas.

- Completion Operations: Hydrocarbon production will be minimized during completion and flowback operations. No flowback will occur until the well is connected to a properly sized system. When feasible, natural gas will be flared rather than vented. When sustained producible volumes are obtained, operations will turn to separation facilities and gathering pipeline.

- Production Operations: Efforts will be made to minimize waste. Process equipment (separators, heater treaters, and tanks) is designed for efficient separation and routing produced gas to the sales pipeline. Flaring rather than venting will be the preferred method to handle emergencies and malfunctions. Equipment will be properly maintained with routine inspections and preventative maintenance. Weekly AVOs will be performed at facilities.

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

- Best management practices are used to minimize venting and flaring during downhole operations.
- Flaring will be used in lieu of venting when feasible.
- Adequate well control during completion operations will be employed to minimize oil and gas production.
- Tanks and vessels are isolated from their respective facilities prior to inspection, maintenance, and repairs.
- The preventive maintenance program includes weekly AVO inspections, identification of failures or malfunctions, and repairs as needed.
- Coordinate with third-party gathering and sales operators to minimize downtime and the need for venting/flaring during downstream pipeline and gas plant events.