

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 341731

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

1. Operator Name and Address STEWARD ENERGY II, LLC 2600 Dallas Parkway Frisco, TX 75034		2. OGRID Number 371682
		3. API Number 30-025-51639
4. Property Code 332055	5. Property Name VAMONOS FEE	6. Well No. 004H

7. Surface Location

UL - Lot B	Section 34	Township 13S	Range 38E	Lot Idn B	Feet From 695	N/S Line N	Feet From 1914	E/W Line E	County Lea
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8. Proposed Bottom Hole Location

UL - Lot C	Section 27	Township 13S	Range 38E	Lot Idn C	Feet From 100	N/S Line N	Feet From 1900	E/W Line W	County Lea
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9. Pool Information

BRONCO;SAN ANDRES, SOUTH	7500
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type Private	15. Ground Level Elevation 3810
16. Multiple N	17. Proposed Depth 11178	18. Formation San Andres	19. Contractor	20. Spud Date 8/1/2023
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	2500	1000	0
Prod	8.75	7	29	11178	1000	0
Prod	8.75	5.5	20	11178	1000	0

Casing/Cement Program: Additional Comments

TAPERED PRODUCTION CASING

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	1500	SCHAFER
Annular	3000	1500	SCHAFER

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.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Scott Stedman	Approved By: Paul F Kautz	
Title: Executive Vice President	Title: Geologist	
Email Address: scott.stedman@stewardenergy.net	Approved Date: 6/21/2023	Expiration Date: 6/21/2025
Date: 6/13/2023	Phone: 214-297-0514	Conditions of Approval Attached

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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

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-51639		Pool Code 7500	Pool Name Bronco; San Andres, South
Property Code 332055	Property Name VAMONOS FEE		Well Number #4H
OGRID No. 371682	Operator Name STEWARD ENERGY II, LLC		Elevation 3810'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	34	13 S	38 E		695	NORTH	1914	EAST	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
C	27	13 S	38 E		100	NORTH	1900	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320.0			

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 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. Vanessa De Los Santos 6/7/2023 Signature Date Vanessa De Los Santos Printed Name vanessa.delossantos@stewardenergy.net 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. May 3, 2023 Date of Survey Signature and Seal of Professional Surveyor: Job No.: 23-04-3081 MATTHEW B. TOMERLIN, N.M.P.L.S. Certificate Number 23203
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NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 33.153473°
LONGITUDE = -103.082356°
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 33.153366°
LONGITUDE = -103.081857°
STATE PLANE NAD 83 (N.M. EAST)
N: 785660.78' E: 924204.87'
STATE PLANE NAD 27 (N.M. EAST)
N: 785598.30' E: 883028.89'

NAD 83 (FTP)
LATITUDE = 33.155657°
LONGITUDE = -103.086651°
NAD 27 (FTP)
LATITUDE = 33.155549°
LONGITUDE = -103.086152°
STATE PLANE NAD 83 (N.M. EAST)
N: 786439.53' E: 922880.84'
STATE PLANE NAD 27 (N.M. EAST)
N: 786376.96' E: 881704.87'

NAD 83 (LTP/BHL)
LATITUDE = 33.169681°
LONGITUDE = -103.087275°
NAD 27 (LTP/BHL)
LATITUDE = 33.169573°
LONGITUDE = -103.086776°
STATE PLANE NAD 83 (N.M. EAST)
N: 791540.18' E: 922629.08'
STATE PLANE NAD 27 (N.M. EAST)
N: 791477.46' E: 881453.13'

APPROXIMATE WELL BORE DISTANCE FROM FTP TO LTP	
SECTION 27	5106.86'
TOTAL	5106.86'

- ☒ FND. U.S.G.L.O. MON. UNLESS OTHERWISE NOTED
☒ CALC. CORNER
☒ SHL/ KOP/ PPP/ LP
☒ OIL & GAS LEASE
☒ HORIZONTAL SPACING UNIT

NOTES

- ALL COORDINATES, BEARINGS, AND DISTANCES CONTAINED HEREIN ARE GRID, BASED UPON THE NEW MEXICO STATE PLANE COORDINATES SYSTEM, NORTH AMERICAN DATUM 83, NEW MEXICO EAST (3001), NAVD 88.
- THIS DOCUMENT IS BASED UPON AN ON THE GROUND SURVEY PERFORMED DURING MAY, 2023, CERTIFICATION OF THIS DOCUMENT IS ONLY TO THE LOCATION OF THIS EASEMENT IN RELATION TO RECORDED MONUMENT OF DEEDS PROVIDED BY THE CLIENT.
- ELEVATIONS MSL, DERIVED FROM G.N.S.S. OBSERVATION AND DERIVED FROM SAID ON-THE-GROUND SURVEY.

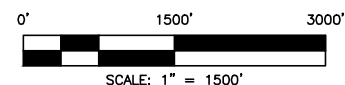


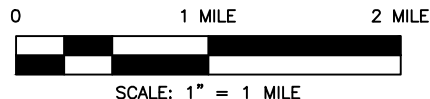
EXHIBIT 1 LOCATION & ELEVATION VERIFICATION MAP



LEASE NAME AND WELL NUMBER: VAMONOS FEE #4H
 LATITUDE: N 33.153473 LONGITUDE: W 103.082356 ELEVATION: 3810'
 DESCRIPTION: 695' FNL & 1914' FEL



Situated in
 SECTION 34, TOWNSHIP 13 SOUTH, RANGE 38 EAST
 LEA COUNTY, NEW MEXICO



LEGEND

- S.H.L.
- F.T.P.; K.O.P.; P.P.P.; L.T.P.; B.H.L.
- PROPOSED WELL BORE
- SECTION LINE
- TOWNSHIP/RANGE LINE

DATAPOINT
 SURVEYING & MAPPING

12450 Network Blvd. - Suite 155
 San Antonio, TX 78249
 Phone: 726-777-4240
 Firm No. 10194585

DRAWN BY: JH

DATE: 05/10/2023

REV.

CHECKED BY: JW

DATE: 05/10/2023

0

AFE #

PROJECT ID: 23-04-3081

PAGE 1 OF 1



STEWART
ENERGY II

 PROPOSED WELL BORE
 SECTION LINE
 TOWNSHIP/RANGE LINE

PAGE 1 OF 1

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Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments
Permit 341731

PERMIT COMMENTS

Operator Name and Address: STEWARD ENERGY II, LLC [371682] 2600 Dallas Parkway Frisco, TX 75034		API Number: 30-025-51639
		Well: VAMONOS FEE #004H
Created By	Comment	Comment Date
vlopez	TAPPERED PRODUCTION CASING	6/13/2023

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

Form APD Conditions

Permit 341731

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: STEWARD ENERGY II, LLC [371682] 2600 Dallas Parkway Frisco, TX 75034	API Number: 30-025-51639
	Well: VAMONOS FEE #004H

OCD Reviewer	Condition
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	Cement is required to circulate on both surface and intermediate1 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	Pit construction and closure must satisfy all requirements of your approved plan
pkautz	If using a pit for drilling and completion operations, must have an approved pit from prior to spudding the well

Steward Energy II, LLC

DrilTech, LLC

Steward Energy II, LLC

Vamonos Fee 4H
Wellbore #1
Plan #2

SURFACE LOCATION

US State Plane 1983
New Mexico Eastern Zone
Elevation: GL 3810' + RKB 19' @ 3829.00ft

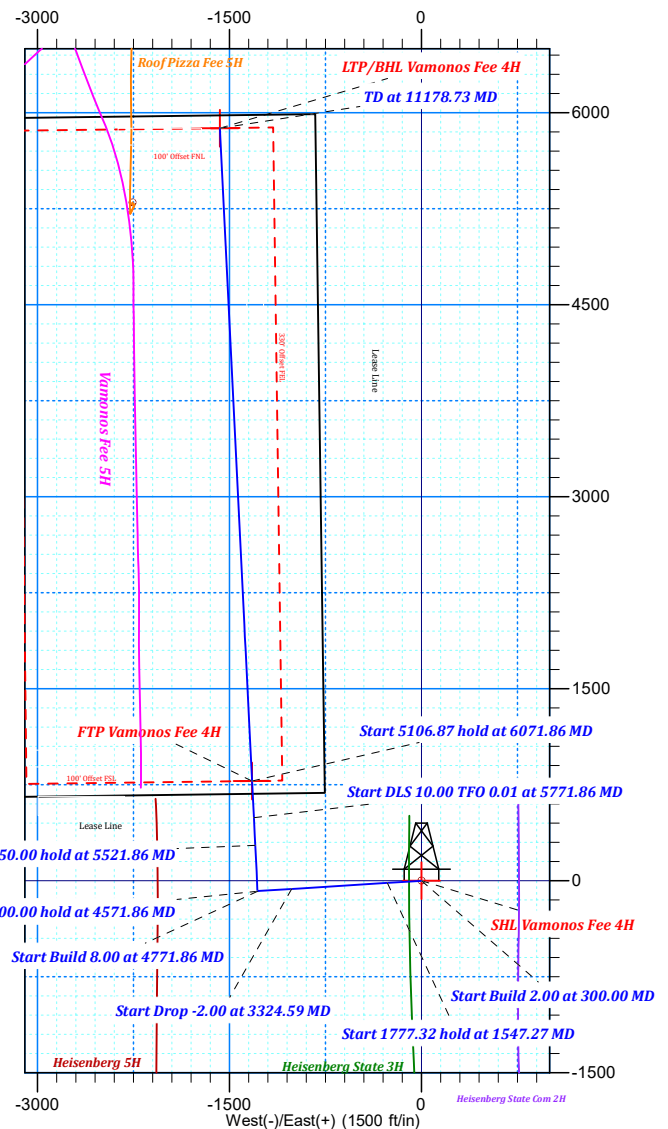
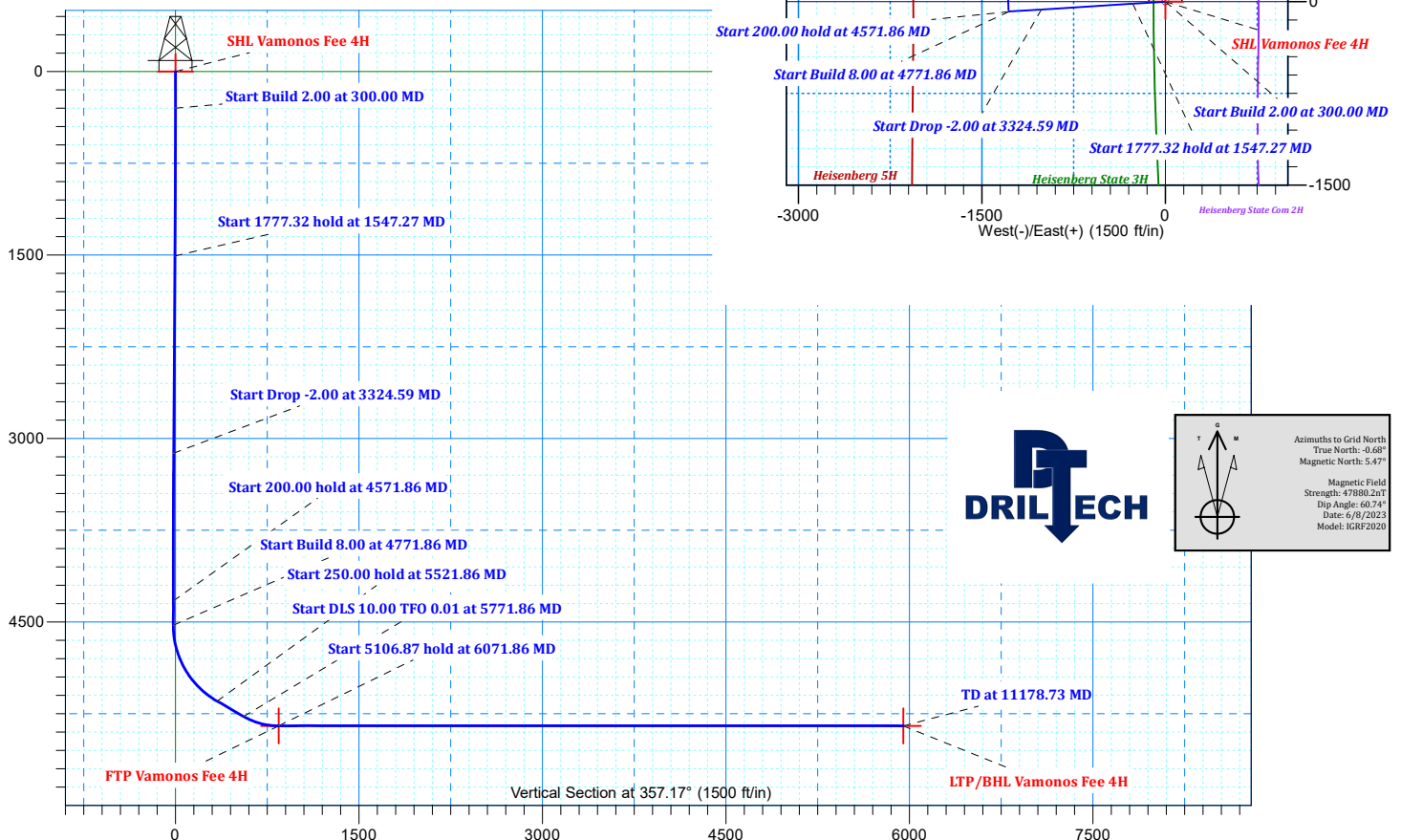
Northing	Easting	Latitude	Longitude
785660.78	924204.87	33.153°N	103.082°W

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL Vamonos Fee 4H	0.00	0.00	0.00	785660.78	924204.87
FTP Vamonos Fee 4H	5350.00	778.75	-1324.03	786439.53	922880.84
LTP/BHL Vamonos Fee 4H	5350.00	5879.41	-1575.79	791540.18	922629.08

LATERAL SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
1547.27	24.95	266.37	1508.24	-16.92	-266.72	2.00	-3.73
3324.59	24.95	266.37	3119.75	-64.37	-1014.81	0.00	-14.18
4571.86	0.00	0.00	4327.99	-81.28	-1281.53	2.00	-17.91
4771.86	0.00	0.00	4527.99	-81.28	-1281.53	0.00	-17.91
5521.86	60.00	357.17	5148.24	276.38	-1299.21	8.00	340.19
5771.86	60.00	357.17	5273.24	492.62	-1309.90	0.00	556.69
6071.86	90.00	357.17	5350.00	778.75	-1324.03	10.00	843.17
11178.73	90.00	357.17	5350.00	5879.41	-1575.79	0.00	5950.04



Steward Energy II, LLC

Lea County, NM (NAD 83) NM East Zone

Vamonos Fee 4H

Vamonos Fee 4H

Wellbore #1

Plan: Plan #2

Standard Planning Report

09 June, 2023

Planning Report

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

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

Site	Vamonos Fee 4H			
Site Position:		Northing:	785,660.78 usft	Latitude: 33.153°N
From:	Map	Easting:	924,204.87 usft	Longitude: 103.082°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	

Well	Vamonos Fee 4H			
Well Position	+N/-S	0.00 ft	Northing:	785,660.78 usft
	+E/-W	0.00 ft	Easting:	924,204.87 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft
Grid Convergence:		0.68 °	Ground Level:	3,810.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	6/8/2023	6.15	60.74	47,880.18082954

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	357.17

Plan Survey Tool Program	Date	6/9/2023		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	11,178.73	Plan #2 (Wellbore #1)	MWD
				MWD - Standard

Planning Report

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,547.27	24.95	266.37	1,508.24	-16.92	-266.72	2.00	2.00	0.00	266.37	
3,324.59	24.95	266.37	3,119.75	-64.37	-1,014.81	0.00	0.00	0.00	0.00	
4,571.86	0.00	0.00	4,327.99	-81.28	-1,281.53	2.00	-2.00	0.00	180.00	
4,771.86	0.00	0.00	4,527.99	-81.28	-1,281.53	0.00	0.00	0.00	0.00	
5,521.86	60.00	357.17	5,148.24	276.38	-1,299.21	8.00	8.00	0.00	357.17	
5,771.86	60.00	357.17	5,273.24	492.62	-1,309.90	0.00	0.00	0.00	0.00	
6,071.86	90.00	357.17	5,350.00	778.75	-1,324.03	10.00	10.00	0.00	0.01	
11,178.73	90.00	357.17	5,350.00	5,879.41	-1,575.79	0.00	0.00	0.00	0.00	LTP/BHL Vamonos Fe

Planning Report

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00 at 300.00 MD									
400.00	2.00	266.37	399.98	-0.11	-1.74	-0.02	2.00	2.00	0.00
500.00	4.00	266.37	499.84	-0.44	-6.96	-0.10	2.00	2.00	0.00
600.00	6.00	266.37	599.45	-0.99	-15.66	-0.22	2.00	2.00	0.00
700.00	8.00	266.37	698.70	-1.76	-27.82	-0.39	2.00	2.00	0.00
800.00	10.00	266.37	797.47	-2.75	-43.44	-0.61	2.00	2.00	0.00
900.00	12.00	266.37	895.62	-3.96	-62.48	-0.87	2.00	2.00	0.00
1,000.00	14.00	266.37	993.06	-5.39	-84.93	-1.19	2.00	2.00	0.00
1,100.00	16.00	266.37	1,089.64	-7.02	-110.75	-1.55	2.00	2.00	0.00
1,200.00	18.00	266.37	1,185.27	-8.88	-139.93	-1.96	2.00	2.00	0.00
1,300.00	20.00	266.37	1,279.82	-10.94	-172.42	-2.41	2.00	2.00	0.00
1,400.00	22.00	266.37	1,373.17	-13.20	-208.18	-2.91	2.00	2.00	0.00
1,500.00	24.00	266.37	1,465.21	-15.68	-247.18	-3.45	2.00	2.00	0.00
1,547.27	24.95	266.37	1,508.24	-16.92	-266.72	-3.73	2.00	2.00	0.00
Start 1777.32 hold at 1547.27 MD									
1,600.00	24.95	266.37	1,556.05	-18.32	-288.91	-4.04	0.00	0.00	0.00
1,700.00	24.95	266.37	1,646.72	-20.99	-331.01	-4.63	0.00	0.00	0.00
1,800.00	24.95	266.37	1,737.39	-23.66	-373.10	-5.21	0.00	0.00	0.00
1,900.00	24.95	266.37	1,828.06	-26.33	-415.19	-5.80	0.00	0.00	0.00
2,000.00	24.95	266.37	1,918.73	-29.00	-457.28	-6.39	0.00	0.00	0.00
2,100.00	24.95	266.37	2,009.40	-31.67	-499.37	-6.98	0.00	0.00	0.00
2,200.00	24.95	266.37	2,100.07	-34.34	-541.46	-7.57	0.00	0.00	0.00
2,300.00	24.95	266.37	2,190.75	-37.01	-583.55	-8.16	0.00	0.00	0.00
2,400.00	24.95	266.37	2,281.42	-39.68	-625.64	-8.74	0.00	0.00	0.00
2,500.00	24.95	266.37	2,372.09	-42.35	-667.73	-9.33	0.00	0.00	0.00
2,600.00	24.95	266.37	2,462.76	-45.02	-709.82	-9.92	0.00	0.00	0.00
2,700.00	24.95	266.37	2,553.43	-47.69	-751.91	-10.51	0.00	0.00	0.00
2,800.00	24.95	266.37	2,644.10	-50.36	-794.00	-11.10	0.00	0.00	0.00
2,900.00	24.95	266.37	2,734.77	-53.03	-836.10	-11.69	0.00	0.00	0.00
3,000.00	24.95	266.37	2,825.44	-55.70	-878.19	-12.27	0.00	0.00	0.00
3,100.00	24.95	266.37	2,916.11	-58.37	-920.28	-12.86	0.00	0.00	0.00
3,200.00	24.95	266.37	3,006.78	-61.04	-962.37	-13.45	0.00	0.00	0.00
3,300.00	24.95	266.37	3,097.46	-63.71	-1,004.46	-14.04	0.00	0.00	0.00
3,324.59	24.95	266.37	3,119.75	-64.37	-1,014.81	-14.18	0.00	0.00	0.00
Start Drop -2.00 at 3324.59 MD									
3,400.00	23.44	266.37	3,188.54	-66.32	-1,045.65	-14.61	2.00	-2.00	0.00
3,500.00	21.44	266.37	3,280.96	-68.74	-1,083.74	-15.15	2.00	-2.00	0.00
3,600.00	19.44	266.37	3,374.66	-70.95	-1,118.58	-15.63	2.00	-2.00	0.00
3,700.00	17.44	266.37	3,469.53	-72.95	-1,150.14	-16.08	2.00	-2.00	0.00
3,800.00	15.44	266.37	3,565.43	-74.74	-1,178.38	-16.47	2.00	-2.00	0.00
3,900.00	13.44	266.37	3,662.27	-76.32	-1,203.26	-16.82	2.00	-2.00	0.00
4,000.00	11.44	266.37	3,759.92	-77.68	-1,224.76	-17.12	2.00	-2.00	0.00
4,100.00	9.44	266.37	3,858.26	-78.83	-1,242.84	-17.37	2.00	-2.00	0.00
4,200.00	7.44	266.37	3,957.17	-79.76	-1,257.48	-17.58	2.00	-2.00	0.00
4,300.00	5.44	266.37	4,056.54	-80.47	-1,268.67	-17.73	2.00	-2.00	0.00
4,400.00	3.44	266.37	4,156.23	-80.96	-1,276.39	-17.84	2.00	-2.00	0.00
4,500.00	1.44	266.37	4,256.14	-81.23	-1,280.63	-17.90	2.00	-2.00	0.00
4,571.86	0.00	0.00	4,327.99	-81.28	-1,281.53	-17.91	2.00	-2.00	0.00
Start 200.00 hold at 4571.86 MD									
4,600.00	0.00	0.00	4,356.13	-81.28	-1,281.53	-17.91	0.00	0.00	0.00

Planning Report

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	0.00	0.00	4,456.13	-81.28	-1,281.53	-17.91	0.00	0.00	0.00
4,771.86	0.00	0.00	4,527.99	-81.28	-1,281.53	-17.91	0.00	0.00	0.00
Start Build 8.00 at 4771.86 MD									
4,800.00	2.25	357.17	4,556.12	-80.73	-1,281.56	-17.36	8.00	8.00	0.00
4,850.00	6.25	357.17	4,605.97	-77.03	-1,281.74	-13.65	8.00	8.00	0.00
4,900.00	10.25	357.17	4,655.45	-69.86	-1,282.09	-6.48	8.00	8.00	0.00
4,950.00	14.25	357.17	4,704.30	-59.27	-1,282.62	4.13	8.00	8.00	0.00
5,000.00	18.25	357.17	4,752.29	-45.30	-1,283.31	18.12	8.00	8.00	0.00
5,050.00	22.25	357.17	4,799.19	-28.02	-1,284.16	35.42	8.00	8.00	0.00
5,100.00	26.25	357.17	4,844.77	-7.51	-1,285.18	55.95	8.00	8.00	0.00
5,150.00	30.25	357.17	4,888.80	16.13	-1,286.35	79.62	8.00	8.00	0.00
5,200.00	34.25	357.17	4,931.08	42.77	-1,287.66	106.29	8.00	8.00	0.00
5,250.00	38.25	357.17	4,971.39	72.29	-1,289.12	135.85	8.00	8.00	0.00
5,300.00	42.25	357.17	5,009.55	104.55	-1,290.72	168.15	8.00	8.00	0.00
5,350.00	46.25	357.17	5,045.35	139.39	-1,292.44	203.04	8.00	8.00	0.00
5,400.00	50.25	357.17	5,078.64	176.64	-1,294.28	240.33	8.00	8.00	0.00
5,450.00	54.25	357.17	5,109.25	216.12	-1,296.23	279.86	8.00	8.00	0.00
5,500.00	58.25	357.17	5,137.02	257.64	-1,298.28	321.42	8.00	8.00	0.00
5,521.86	60.00	357.17	5,148.24	276.38	-1,299.21	340.19	8.00	8.00	0.00
Start 250.00 hold at 5521.86 MD									
5,600.00	60.00	357.17	5,187.30	343.97	-1,302.55	407.86	0.00	0.00	0.00
5,700.00	60.00	357.17	5,237.30	430.46	-1,306.83	494.46	0.00	0.00	0.00
5,771.86	60.00	357.17	5,273.24	492.62	-1,309.90	556.69	0.00	0.00	0.00
Start DLS 10.00 TFO 0.01 at 5771.86 MD									
5,800.00	62.81	357.17	5,286.70	517.30	-1,311.12	581.40	10.00	10.00	0.00
5,850.00	67.81	357.17	5,307.58	562.66	-1,313.36	626.81	10.00	10.00	0.00
5,900.00	72.81	357.17	5,324.41	609.66	-1,315.68	673.88	10.00	10.00	0.00
5,950.00	77.81	357.17	5,337.09	657.95	-1,318.07	722.23	10.00	10.00	0.00
6,000.00	82.81	357.17	5,345.50	707.16	-1,320.50	771.50	10.00	10.00	0.00
6,050.00	87.81	357.17	5,349.58	756.92	-1,322.96	821.32	10.00	10.00	0.00
6,071.86	90.00	357.17	5,350.00	778.75	-1,324.03	843.17	10.00	10.00	0.00
Start 5106.87 hold at 6071.86 MD									
6,100.00	90.00	357.17	5,350.00	806.86	-1,325.42	871.31	0.00	0.00	0.00
6,200.00	90.00	357.17	5,350.00	906.73	-1,330.35	971.31	0.00	0.00	0.00
6,300.00	90.00	357.17	5,350.00	1,006.61	-1,335.28	1,071.31	0.00	0.00	0.00
6,400.00	90.00	357.17	5,350.00	1,106.49	-1,340.21	1,171.31	0.00	0.00	0.00
6,500.00	90.00	357.17	5,350.00	1,206.37	-1,345.14	1,271.31	0.00	0.00	0.00
6,600.00	90.00	357.17	5,350.00	1,306.25	-1,350.07	1,371.31	0.00	0.00	0.00
6,700.00	90.00	357.17	5,350.00	1,406.13	-1,355.00	1,471.31	0.00	0.00	0.00
6,800.00	90.00	357.17	5,350.00	1,506.00	-1,359.93	1,571.31	0.00	0.00	0.00
6,900.00	90.00	357.17	5,350.00	1,605.88	-1,364.86	1,671.31	0.00	0.00	0.00
7,000.00	90.00	357.17	5,350.00	1,705.76	-1,369.79	1,771.31	0.00	0.00	0.00
7,100.00	90.00	357.17	5,350.00	1,805.64	-1,374.72	1,871.31	0.00	0.00	0.00
7,200.00	90.00	357.17	5,350.00	1,905.52	-1,379.65	1,971.31	0.00	0.00	0.00
7,300.00	90.00	357.17	5,350.00	2,005.40	-1,384.58	2,071.31	0.00	0.00	0.00
7,400.00	90.00	357.17	5,350.00	2,105.27	-1,389.51	2,171.31	0.00	0.00	0.00
7,500.00	90.00	357.17	5,350.00	2,205.15	-1,394.44	2,271.31	0.00	0.00	0.00
7,600.00	90.00	357.17	5,350.00	2,305.03	-1,399.37	2,371.31	0.00	0.00	0.00
7,700.00	90.00	357.17	5,350.00	2,404.91	-1,404.30	2,471.31	0.00	0.00	0.00
7,800.00	90.00	357.17	5,350.00	2,504.79	-1,409.23	2,571.31	0.00	0.00	0.00
7,900.00	90.00	357.17	5,350.00	2,604.67	-1,414.16	2,671.31	0.00	0.00	0.00
8,000.00	90.00	357.17	5,350.00	2,704.55	-1,419.09	2,771.31	0.00	0.00	0.00
8,100.00	90.00	357.17	5,350.00	2,804.42	-1,424.02	2,871.31	0.00	0.00	0.00

Planning Report

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,200.00	90.00	357.17	5,350.00	2,904.30	-1,428.95	2,971.31	0.00	0.00	0.00	
8,300.00	90.00	357.17	5,350.00	3,004.18	-1,433.88	3,071.31	0.00	0.00	0.00	
8,400.00	90.00	357.17	5,350.00	3,104.06	-1,438.81	3,171.31	0.00	0.00	0.00	
8,500.00	90.00	357.17	5,350.00	3,203.94	-1,443.74	3,271.31	0.00	0.00	0.00	
8,600.00	90.00	357.17	5,350.00	3,303.82	-1,448.67	3,371.31	0.00	0.00	0.00	
8,700.00	90.00	357.17	5,350.00	3,403.69	-1,453.60	3,471.31	0.00	0.00	0.00	
8,800.00	90.00	357.17	5,350.00	3,503.57	-1,458.53	3,571.31	0.00	0.00	0.00	
8,900.00	90.00	357.17	5,350.00	3,603.45	-1,463.46	3,671.31	0.00	0.00	0.00	
9,000.00	90.00	357.17	5,350.00	3,703.33	-1,468.39	3,771.31	0.00	0.00	0.00	
9,100.00	90.00	357.17	5,350.00	3,803.21	-1,473.32	3,871.31	0.00	0.00	0.00	
9,200.00	90.00	357.17	5,350.00	3,903.09	-1,478.24	3,971.31	0.00	0.00	0.00	
9,300.00	90.00	357.17	5,350.00	4,002.96	-1,483.17	4,071.31	0.00	0.00	0.00	
9,400.00	90.00	357.17	5,350.00	4,102.84	-1,488.10	4,171.31	0.00	0.00	0.00	
9,500.00	90.00	357.17	5,350.00	4,202.72	-1,493.03	4,271.31	0.00	0.00	0.00	
9,600.00	90.00	357.17	5,350.00	4,302.60	-1,497.96	4,371.31	0.00	0.00	0.00	
9,700.00	90.00	357.17	5,350.00	4,402.48	-1,502.89	4,471.31	0.00	0.00	0.00	
9,800.00	90.00	357.17	5,350.00	4,502.36	-1,507.82	4,571.31	0.00	0.00	0.00	
9,900.00	90.00	357.17	5,350.00	4,602.23	-1,512.75	4,671.31	0.00	0.00	0.00	
10,000.00	90.00	357.17	5,350.00	4,702.11	-1,517.68	4,771.31	0.00	0.00	0.00	
10,100.00	90.00	357.17	5,350.00	4,801.99	-1,522.61	4,871.31	0.00	0.00	0.00	
10,200.00	90.00	357.17	5,350.00	4,901.87	-1,527.54	4,971.31	0.00	0.00	0.00	
10,300.00	90.00	357.17	5,350.00	5,001.75	-1,532.47	5,071.31	0.00	0.00	0.00	
10,400.00	90.00	357.17	5,350.00	5,101.63	-1,537.40	5,171.31	0.00	0.00	0.00	
10,500.00	90.00	357.17	5,350.00	5,201.51	-1,542.33	5,271.31	0.00	0.00	0.00	
10,600.00	90.00	357.17	5,350.00	5,301.38	-1,547.26	5,371.31	0.00	0.00	0.00	
10,700.00	90.00	357.17	5,350.00	5,401.26	-1,552.19	5,471.31	0.00	0.00	0.00	
10,800.00	90.00	357.17	5,350.00	5,501.14	-1,557.12	5,571.31	0.00	0.00	0.00	
10,900.00	90.00	357.17	5,350.00	5,601.02	-1,562.05	5,671.31	0.00	0.00	0.00	
11,000.00	90.00	357.17	5,350.00	5,700.90	-1,566.98	5,771.31	0.00	0.00	0.00	
11,100.00	90.00	357.17	5,350.00	5,800.78	-1,571.91	5,871.31	0.00	0.00	0.00	
11,178.73	90.00	357.17	5,350.00	5,879.41	-1,575.79	5,950.04	0.00	0.00	0.00	
TD at 11178.73 MD										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SHL Vamonos Fee 4H - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	785,660.78	924,204.87	33.153°N	103.082°W	
FTP Vamonos Fee 4H - plan hits target center - Point	0.00	0.00	5,350.00	778.75	-1,324.03	786,439.53	922,880.84	33.156°N	103.087°W	
LTP/BHL Vamonos Fee - plan hits target center - Point	0.00	0.00	5,350.00	5,879.41	-1,575.79	791,540.18	922,629.08	33.170°N	103.087°W	

Planning Report

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
300.00	300.00	0.00	0.00	Start Build 2.00 at 300.00 MD	
1,547.27	1,508.24	-16.92	-266.72	Start 1777.32 hold at 1547.27 MD	
3,324.59	3,119.75	-64.37	-1,014.81	Start Drop -2.00 at 3324.59 MD	
4,571.86	4,327.99	-81.28	-1,281.53	Start 200.00 hold at 4571.86 MD	
4,771.86	4,527.99	-81.28	-1,281.53	Start Build 8.00 at 4771.86 MD	
5,521.86	5,148.24	276.38	-1,299.21	Start 250.00 hold at 5521.86 MD	
5,771.86	5,273.24	492.62	-1,309.90	Start DLS 10.00 TFO 0.01 at 5771.86 MD	
6,071.86	5,350.00	778.75	-1,324.03	Start 5106.87 hold at 6071.86 MD	
11,178.73	5,350.00	5,879.41	-1,575.79	TD at 11178.73 MD	

Steward Energy II, LLC

Lea County, NM (NAD 83) NM East Zone

Vamonos Fee 4H

Vamonos Fee 4H

Wellbore #1

Plan: Plan #2

Standard Planning Report - Geographic

09 June, 2023

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

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

Site		Vamonos Fee 4H			
Site Position:		Northing:	785,660.78 usft	Latitude:	33.153°N
From:	Map	Easting:	924,204.87 usft	Longitude:	103.082°W
Position Uncertainty:		0.00 ft	Slot Radius:	13.200 in	

Well	Vamonos Fee 4H					
Well Position	+N/-S	0.00 ft	Northing:	785,660.78 usft	Latitude:	33.153°N
	+E/-W	0.00 ft	Easting:	924,204.87 usft	Longitude:	103.082°W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,810.00 ft
Grid Convergence:		0.68 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	6/8/2023	6.15	60.74	47,880.18082954

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	357.17

Plan Survey Tool Program	Date	6/9/2023		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	11,178.73 Plan #2 (Wellbore #1)	MWD	
			MWD - Standard	

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,547.27	24.95	266.37	1,508.24	-16.92	-266.72	2.00	2.00	0.00	266.37	
3,324.59	24.95	266.37	3,119.75	-64.37	-1,014.81	0.00	0.00	0.00	0.00	
4,571.86	0.00	0.00	4,327.99	-81.28	-1,281.53	2.00	-2.00	0.00	180.00	
4,771.86	0.00	0.00	4,527.99	-81.28	-1,281.53	0.00	0.00	0.00	0.00	
5,521.86	60.00	357.17	5,148.24	276.38	-1,299.21	8.00	8.00	0.00	357.17	
5,771.86	60.00	357.17	5,273.24	492.62	-1,309.90	0.00	0.00	0.00	0.00	
6,071.86	90.00	357.17	5,350.00	778.75	-1,324.03	10.00	10.00	0.00	0.01	
11,178.73	90.00	357.17	5,350.00	5,879.41	-1,575.79	0.00	0.00	0.00	0.00	LTP/BHL Vamonos Fe

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	785,660.78	924,204.87	33.153°N	103.082°W
100.00	0.00	0.00	100.00	0.00	0.00	785,660.78	924,204.87	33.153°N	103.082°W
200.00	0.00	0.00	200.00	0.00	0.00	785,660.78	924,204.87	33.153°N	103.082°W
300.00	0.00	0.00	300.00	0.00	0.00	785,660.78	924,204.87	33.153°N	103.082°W
Start Build 2.00 at 300.00 MD									
400.00	2.00	266.37	399.98	-0.11	-1.74	785,660.67	924,203.13	33.153°N	103.082°W
500.00	4.00	266.37	499.84	-0.44	-6.96	785,660.34	924,197.91	33.153°N	103.082°W
600.00	6.00	266.37	599.45	-0.99	-15.66	785,659.78	924,189.21	33.153°N	103.082°W
700.00	8.00	266.37	698.70	-1.76	-27.82	785,659.01	924,177.05	33.153°N	103.082°W
800.00	10.00	266.37	797.47	-2.75	-43.44	785,658.02	924,161.44	33.153°N	103.082°W
900.00	12.00	266.37	895.62	-3.96	-62.48	785,656.81	924,142.39	33.153°N	103.083°W
1,000.00	14.00	266.37	993.06	-5.39	-84.93	785,655.39	924,119.95	33.153°N	103.083°W
1,100.00	16.00	266.37	1,089.64	-7.02	-110.75	785,653.75	924,094.12	33.153°N	103.083°W
1,200.00	18.00	266.37	1,185.27	-8.88	-139.93	785,651.90	924,064.94	33.153°N	103.083°W
1,300.00	20.00	266.37	1,279.82	-10.94	-172.42	785,649.84	924,032.45	33.153°N	103.083°W
1,400.00	22.00	266.37	1,373.17	-13.20	-208.18	785,647.57	923,996.69	33.153°N	103.083°W
1,500.00	24.00	266.37	1,465.21	-15.68	-247.18	785,645.10	923,957.69	33.153°N	103.083°W
1,547.27	24.95	266.37	1,508.24	-16.92	-266.72	785,643.86	923,938.15	33.153°N	103.083°W
Start 1777.32 hold at 1547.27 MD									
1,600.00	24.95	266.37	1,556.05	-18.32	-288.91	785,642.45	923,915.96	33.153°N	103.083°W
1,700.00	24.95	266.37	1,646.72	-20.99	-331.01	785,639.78	923,873.87	33.153°N	103.083°W
1,800.00	24.95	266.37	1,737.39	-23.66	-373.10	785,637.11	923,831.78	33.153°N	103.084°W
1,900.00	24.95	266.37	1,828.06	-26.33	-415.19	785,634.44	923,789.68	33.153°N	103.084°W
2,000.00	24.95	266.37	1,918.73	-29.00	-457.28	785,631.77	923,747.59	33.153°N	103.084°W
2,100.00	24.95	266.37	2,009.40	-31.67	-499.37	785,629.10	923,705.50	33.153°N	103.084°W
2,200.00	24.95	266.37	2,100.07	-34.34	-541.46	785,626.43	923,663.41	33.153°N	103.084°W
2,300.00	24.95	266.37	2,190.75	-37.01	-583.55	785,623.76	923,621.32	33.153°N	103.084°W
2,400.00	24.95	266.37	2,281.42	-39.68	-625.64	785,621.10	923,579.23	33.153°N	103.084°W
2,500.00	24.95	266.37	2,372.09	-42.35	-667.73	785,618.43	923,537.14	33.153°N	103.085°W
2,600.00	24.95	266.37	2,462.76	-45.02	-709.82	785,615.76	923,495.05	33.153°N	103.085°W
2,700.00	24.95	266.37	2,553.43	-47.69	-751.91	785,613.09	923,452.96	33.153°N	103.085°W
2,800.00	24.95	266.37	2,644.10	-50.36	-794.00	785,610.42	923,410.87	33.153°N	103.085°W
2,900.00	24.95	266.37	2,734.77	-53.03	-836.10	785,607.75	923,368.78	33.153°N	103.085°W
3,000.00	24.95	266.37	2,825.44	-55.70	-878.19	785,605.08	923,326.69	33.153°N	103.085°W
3,100.00	24.95	266.37	2,916.11	-58.37	-920.28	785,602.41	923,284.59	33.153°N	103.085°W
3,200.00	24.95	266.37	3,006.78	-61.04	-962.37	785,599.74	923,242.50	33.153°N	103.085°W
3,300.00	24.95	266.37	3,097.46	-63.71	-1,004.46	785,597.07	923,200.41	33.153°N	103.086°W
3,324.59	24.95	266.37	3,119.75	-64.37	-1,014.81	785,596.41	923,190.06	33.153°N	103.086°W
Start Drop -2.00 at 3324.59 MD									
3,400.00	23.44	266.37	3,188.54	-66.32	-1,045.65	785,594.46	923,159.22	33.153°N	103.086°W
3,500.00	21.44	266.37	3,280.96	-68.74	-1,083.74	785,592.04	923,121.14	33.153°N	103.086°W
3,600.00	19.44	266.37	3,374.66	-70.95	-1,118.58	785,589.83	923,086.29	33.153°N	103.086°W
3,700.00	17.44	266.37	3,469.53	-72.95	-1,150.14	785,587.83	923,054.73	33.153°N	103.086°W
3,800.00	15.44	266.37	3,565.43	-74.74	-1,178.38	785,586.04	923,026.49	33.153°N	103.086°W
3,900.00	13.44	266.37	3,662.27	-76.32	-1,203.26	785,584.46	923,001.61	33.153°N	103.086°W
4,000.00	11.44	266.37	3,759.92	-77.68	-1,224.76	785,583.10	922,980.12	33.153°N	103.086°W
4,100.00	9.44	266.37	3,858.26	-78.83	-1,242.84	785,581.95	922,962.04	33.153°N	103.086°W
4,200.00	7.44	266.37	3,957.17	-79.76	-1,257.48	785,581.02	922,947.40	33.153°N	103.086°W
4,300.00	5.44	266.37	4,056.54	-80.47	-1,268.67	785,580.31	922,936.21	33.153°N	103.086°W
4,400.00	3.44	266.37	4,156.23	-80.96	-1,276.39	785,579.82	922,928.49	33.153°N	103.087°W
4,500.00	1.44	266.37	4,256.14	-81.23	-1,280.63	785,579.55	922,924.24	33.153°N	103.087°W
4,571.86	0.00	0.00	4,327.99	-81.28	-1,281.53	785,579.49	922,923.34	33.153°N	103.087°W
Start 200.00 hold at 4571.86 MD									
4,600.00	0.00	0.00	4,356.13	-81.28	-1,281.53	785,579.49	922,923.34	33.153°N	103.087°W

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey										
Measured			Vertical			Map		Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting			
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude	
4,700.00	0.00	0.00	4,456.13	-81.28	-1,281.53	785,579.49	922,923.34	33.153°N	103.087°W	
4,771.86	0.00	0.00	4,527.99	-81.28	-1,281.53	785,579.49	922,923.34	33.153°N	103.087°W	
Start Build 8.00 at 4771.86 MD										
4,800.00	2.25	357.17	4,556.12	-80.73	-1,281.56	785,580.05	922,923.32	33.153°N	103.087°W	
4,850.00	6.25	357.17	4,605.97	-77.03	-1,281.74	785,583.75	922,923.13	33.153°N	103.087°W	
4,900.00	10.25	357.17	4,655.45	-69.86	-1,282.09	785,590.91	922,922.78	33.153°N	103.087°W	
4,950.00	14.25	357.17	4,704.30	-59.27	-1,282.62	785,601.51	922,922.26	33.153°N	103.087°W	
5,000.00	18.25	357.17	4,752.29	-45.30	-1,283.31	785,615.48	922,921.56	33.153°N	103.087°W	
5,050.00	22.25	357.17	4,799.19	-28.02	-1,284.16	785,632.76	922,920.71	33.153°N	103.087°W	
5,100.00	26.25	357.17	4,844.77	-7.51	-1,285.18	785,653.27	922,919.70	33.153°N	103.087°W	
5,150.00	30.25	357.17	4,888.80	16.13	-1,286.35	785,676.90	922,918.53	33.154°N	103.087°W	
5,200.00	34.25	357.17	4,931.08	42.77	-1,287.66	785,703.55	922,917.21	33.154°N	103.087°W	
5,250.00	38.25	357.17	4,971.39	72.29	-1,289.12	785,733.07	922,915.75	33.154°N	103.087°W	
5,300.00	42.25	357.17	5,009.55	104.55	-1,290.72	785,765.33	922,914.16	33.154°N	103.087°W	
5,350.00	46.25	357.17	5,045.35	139.39	-1,292.44	785,800.17	922,912.43	33.154°N	103.087°W	
5,400.00	50.25	357.17	5,078.64	176.64	-1,294.28	785,837.42	922,910.59	33.154°N	103.087°W	
5,450.00	54.25	357.17	5,109.25	216.12	-1,296.23	785,876.90	922,908.64	33.154°N	103.087°W	
5,500.00	58.25	357.17	5,137.02	257.64	-1,298.28	785,918.42	922,906.59	33.154°N	103.087°W	
5,521.86	60.00	357.17	5,148.24	276.38	-1,299.21	785,937.16	922,905.66	33.154°N	103.087°W	
Start 250.00 hold at 5521.86 MD										
5,600.00	60.00	357.17	5,187.30	343.97	-1,302.55	786,004.74	922,902.32	33.154°N	103.087°W	
5,700.00	60.00	357.17	5,237.30	430.46	-1,306.83	786,091.24	922,898.05	33.155°N	103.087°W	
5,771.86	60.00	357.17	5,273.24	492.62	-1,309.90	786,153.40	922,894.97	33.155°N	103.087°W	
Start DLS 10.00 TFO 0.01 at 5771.86 MD										
5,800.00	62.81	357.17	5,286.70	517.30	-1,311.12	786,178.07	922,893.75	33.155°N	103.087°W	
5,850.00	67.81	357.17	5,307.58	562.66	-1,313.36	786,223.43	922,891.51	33.155°N	103.087°W	
5,900.00	72.81	357.17	5,324.41	609.66	-1,315.68	786,270.44	922,889.19	33.155°N	103.087°W	
5,950.00	77.81	357.17	5,337.09	657.95	-1,318.07	786,318.73	922,886.80	33.155°N	103.087°W	
6,000.00	82.81	357.17	5,345.50	707.16	-1,320.50	786,367.94	922,884.37	33.155°N	103.087°W	
6,050.00	87.81	357.17	5,349.58	756.92	-1,322.96	786,417.70	922,881.92	33.156°N	103.087°W	
6,071.86	90.00	357.17	5,350.00	778.75	-1,324.03	786,439.53	922,880.84	33.156°N	103.087°W	
Start 5106.87 hold at 6071.86 MD										
6,100.00	90.00	357.17	5,350.00	806.86	-1,325.42	786,467.63	922,879.45	33.156°N	103.087°W	
6,200.00	90.00	357.17	5,350.00	906.73	-1,330.35	786,567.51	922,874.52	33.156°N	103.087°W	
6,300.00	90.00	357.17	5,350.00	1,006.61	-1,335.28	786,667.39	922,869.59	33.156°N	103.087°W	
6,400.00	90.00	357.17	5,350.00	1,106.49	-1,340.21	786,767.27	922,864.66	33.157°N	103.087°W	
6,500.00	90.00	357.17	5,350.00	1,206.37	-1,345.14	786,867.14	922,859.73	33.157°N	103.087°W	
6,600.00	90.00	357.17	5,350.00	1,306.25	-1,350.07	786,967.02	922,854.80	33.157°N	103.087°W	
6,700.00	90.00	357.17	5,350.00	1,406.13	-1,355.00	787,066.90	922,849.87	33.157°N	103.087°W	
6,800.00	90.00	357.17	5,350.00	1,506.00	-1,359.93	787,166.78	922,844.94	33.158°N	103.087°W	
6,900.00	90.00	357.17	5,350.00	1,605.88	-1,364.86	787,266.66	922,840.01	33.158°N	103.087°W	
7,000.00	90.00	357.17	5,350.00	1,705.76	-1,369.79	787,366.54	922,835.08	33.158°N	103.087°W	
7,100.00	90.00	357.17	5,350.00	1,805.64	-1,374.72	787,466.41	922,830.16	33.158°N	103.087°W	
7,200.00	90.00	357.17	5,350.00	1,905.52	-1,379.65	787,566.29	922,825.23	33.159°N	103.087°W	
7,300.00	90.00	357.17	5,350.00	2,005.40	-1,384.58	787,666.17	922,820.30	33.159°N	103.087°W	
7,400.00	90.00	357.17	5,350.00	2,105.27	-1,389.51	787,766.05	922,815.37	33.159°N	103.087°W	
7,500.00	90.00	357.17	5,350.00	2,205.15	-1,394.44	787,865.93	922,810.44	33.160°N	103.087°W	
7,600.00	90.00	357.17	5,350.00	2,305.03	-1,399.37	787,965.80	922,805.51	33.160°N	103.087°W	
7,700.00	90.00	357.17	5,350.00	2,404.91	-1,404.30	788,065.68	922,800.58	33.160°N	103.087°W	
7,800.00	90.00	357.17	5,350.00	2,504.79	-1,409.23	788,165.56	922,795.65	33.160°N	103.087°W	
7,900.00	90.00	357.17	5,350.00	2,604.67	-1,414.16	788,265.44	922,790.72	33.161°N	103.087°W	
8,000.00	90.00	357.17	5,350.00	2,704.55	-1,419.09	788,365.32	922,785.79	33.161°N	103.087°W	
8,100.00	90.00	357.17	5,350.00	2,804.42	-1,424.02	788,465.20	922,780.86	33.161°N	103.087°W	
8,200.00	90.00	357.17	5,350.00	2,904.30	-1,428.95	788,565.07	922,775.93	33.161°N	103.087°W	

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
8,300.00	90.00	357.17	5,350.00	3,004.18	-1,433.88	788,664.95	922,771.00	33.162°N	103.087°W	
8,400.00	90.00	357.17	5,350.00	3,104.06	-1,438.81	788,764.83	922,766.07	33.162°N	103.087°W	
8,500.00	90.00	357.17	5,350.00	3,203.94	-1,443.74	788,864.71	922,761.14	33.162°N	103.087°W	
8,600.00	90.00	357.17	5,350.00	3,303.82	-1,448.67	788,964.59	922,756.21	33.163°N	103.087°W	
8,700.00	90.00	357.17	5,350.00	3,403.69	-1,453.60	789,064.46	922,751.28	33.163°N	103.087°W	
8,800.00	90.00	357.17	5,350.00	3,503.57	-1,458.53	789,164.34	922,746.35	33.163°N	103.087°W	
8,900.00	90.00	357.17	5,350.00	3,603.45	-1,463.46	789,264.22	922,741.42	33.163°N	103.087°W	
9,000.00	90.00	357.17	5,350.00	3,703.33	-1,468.39	789,364.10	922,736.49	33.164°N	103.087°W	
9,100.00	90.00	357.17	5,350.00	3,803.21	-1,473.32	789,463.98	922,731.56	33.164°N	103.087°W	
9,200.00	90.00	357.17	5,350.00	3,903.09	-1,478.24	789,563.86	922,726.63	33.164°N	103.087°W	
9,300.00	90.00	357.17	5,350.00	4,002.96	-1,483.17	789,663.73	922,721.70	33.165°N	103.087°W	
9,400.00	90.00	357.17	5,350.00	4,102.84	-1,488.10	789,763.61	922,716.77	33.165°N	103.087°W	
9,500.00	90.00	357.17	5,350.00	4,202.72	-1,493.03	789,863.49	922,711.84	33.165°N	103.087°W	
9,600.00	90.00	357.17	5,350.00	4,302.60	-1,497.96	789,963.37	922,706.91	33.165°N	103.087°W	
9,700.00	90.00	357.17	5,350.00	4,402.48	-1,502.89	790,063.25	922,701.98	33.166°N	103.087°W	
9,800.00	90.00	357.17	5,350.00	4,502.36	-1,507.82	790,163.13	922,697.05	33.166°N	103.087°W	
9,900.00	90.00	357.17	5,350.00	4,602.23	-1,512.75	790,263.00	922,692.12	33.166°N	103.087°W	
10,000.00	90.00	357.17	5,350.00	4,702.11	-1,517.68	790,362.88	922,687.19	33.166°N	103.087°W	
10,100.00	90.00	357.17	5,350.00	4,801.99	-1,522.61	790,462.76	922,682.26	33.167°N	103.087°W	
10,200.00	90.00	357.17	5,350.00	4,901.87	-1,527.54	790,562.64	922,677.33	33.167°N	103.087°W	
10,300.00	90.00	357.17	5,350.00	5,001.75	-1,532.47	790,662.52	922,672.40	33.167°N	103.087°W	
10,400.00	90.00	357.17	5,350.00	5,101.63	-1,537.40	790,762.39	922,667.47	33.168°N	103.087°W	
10,500.00	90.00	357.17	5,350.00	5,201.51	-1,542.33	790,862.27	922,662.54	33.168°N	103.087°W	
10,600.00	90.00	357.17	5,350.00	5,301.38	-1,547.26	790,962.15	922,657.61	33.168°N	103.087°W	
10,700.00	90.00	357.17	5,350.00	5,401.26	-1,552.19	791,062.03	922,652.68	33.168°N	103.087°W	
10,800.00	90.00	357.17	5,350.00	5,501.14	-1,557.12	791,161.91	922,647.75	33.169°N	103.087°W	
10,900.00	90.00	357.17	5,350.00	5,601.02	-1,562.05	791,261.79	922,642.82	33.169°N	103.087°W	
11,000.00	90.00	357.17	5,350.00	5,700.90	-1,566.98	791,361.66	922,637.89	33.169°N	103.087°W	
11,100.00	90.00	357.17	5,350.00	5,800.78	-1,571.91	791,461.54	922,632.96	33.169°N	103.087°W	
11,178.73	90.00	357.17	5,350.00	5,879.41	-1,575.79	791,540.18	922,629.08	33.170°N	103.087°W	
TD at 11178.73 MD										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SHL Vamonos Fee 4H - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	785,660.78	924,204.87	33.153°N	103.082°W	
FTP Vamonos Fee 4H - plan hits target center - Point	0.00	0.00	5,350.00	778.75	-1,324.03	786,439.53	922,880.84	33.156°N	103.087°W	
LTP/BHL Vamonos Fee - plan hits target center - Point	0.00	0.00	5,350.00	5,879.41	-1,575.79	791,540.18	922,629.08	33.170°N	103.087°W	

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3810' + RKB 19' @ 3829.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
300.00	300.00	0.00	0.00	Start Build 2.00 at 300.00 MD	
1,547.27	1,508.24	-16.92	-266.72	Start 1777.32 hold at 1547.27 MD	
3,324.59	3,119.75	-64.37	-1,014.81	Start Drop -2.00 at 3324.59 MD	
4,571.86	4,327.99	-81.28	-1,281.53	Start 200.00 hold at 4571.86 MD	
4,771.86	4,527.99	-81.28	-1,281.53	Start Build 8.00 at 4771.86 MD	
5,521.86	5,148.24	276.38	-1,299.21	Start 250.00 hold at 5521.86 MD	
5,771.86	5,273.24	492.62	-1,309.90	Start DLS 10.00 TFO 0.01 at 5771.86 MD	
6,071.86	5,350.00	778.75	-1,324.03	Start 5106.87 hold at 6071.86 MD	
11,178.73	5,350.00	5,879.41	-1,575.79	TD at 11178.73 MD	

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

Submit Electronically
Via E-permitting

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: Steward Energy II LLC **OGRID:** 371682 **Date:** 6/7/2023

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
Vamonos Fee #4H		B-34-13S-38E	695' FNL	500	100	350
			1914 FEL			

IV. Central Delivery Point Name: _____ [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
Vamonos Fee #4H		8/1/2023	8/10/2023	8/15/2023	n/a (no flowback)	8/20/2023

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: <i>Vanessa De Los Santos</i>
Printed Name: Vanessa De Los Santos
Title: Senior Regulatory Analyst
E-mail Address: vanessa.delossantos@stewardenergy.net
Date: 6/7/2023
Phone: 214-297-0500
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval: