

Submit Copy To Appropriate District
Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-51639
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator Steward Energy II, LLC		6. State Oil & Gas Lease No. Property Code- 332055
3. Address of Operator 2600 Dallas Parkway Suite 400, Frisco TX 75034		7. Lease Name or Unit Agreement Name Vamonos Fee
4. Well Location Unit Letter <u>O</u> : <u>274</u> feet from the <u>South</u> line and <u>2466</u> feet from the <u>East</u> line Section <u>22</u> Township <u>13S</u> Range <u>38E</u> NMPM Lea County		8. Well Number 004H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3802' RKB		9. OGRID Number 371682
		10. Pool name or Wildcat Bronco, San Andres, South

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
DOWNHOLE COMMINGLE <input type="checkbox"/>	P AND A <input type="checkbox"/>
CLOSED-LOOP SYSTEM <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>
OTHER: <input type="checkbox"/>	OTHER: Change of drilling plans (Surface Hole & BHL) <input checked="" type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Original C101 was approved 6/1/23. Steward is revising Surface & BHL. Estimated spud date 9/2/2023. Revised directional survey & revised C102 is attached with this request.

Spud Date:

9/2/2023

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Vanessa De Los Santos TITLE Sr. Analyst-Regulatory & Environmental DATE 8/9/23

Type or print name Vanessa De Los Santos E-mail address: vanessa.delossantos@stewardenergy.net PHONE: 214-297-0500

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 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

API Number		Pool Code	Pool Name
Property Code	Property Name VAMONOS FEE		Well Number #4H
OGRID No.	Operator Name STEWARD ENERGY II, LLC		Elevation 3802'

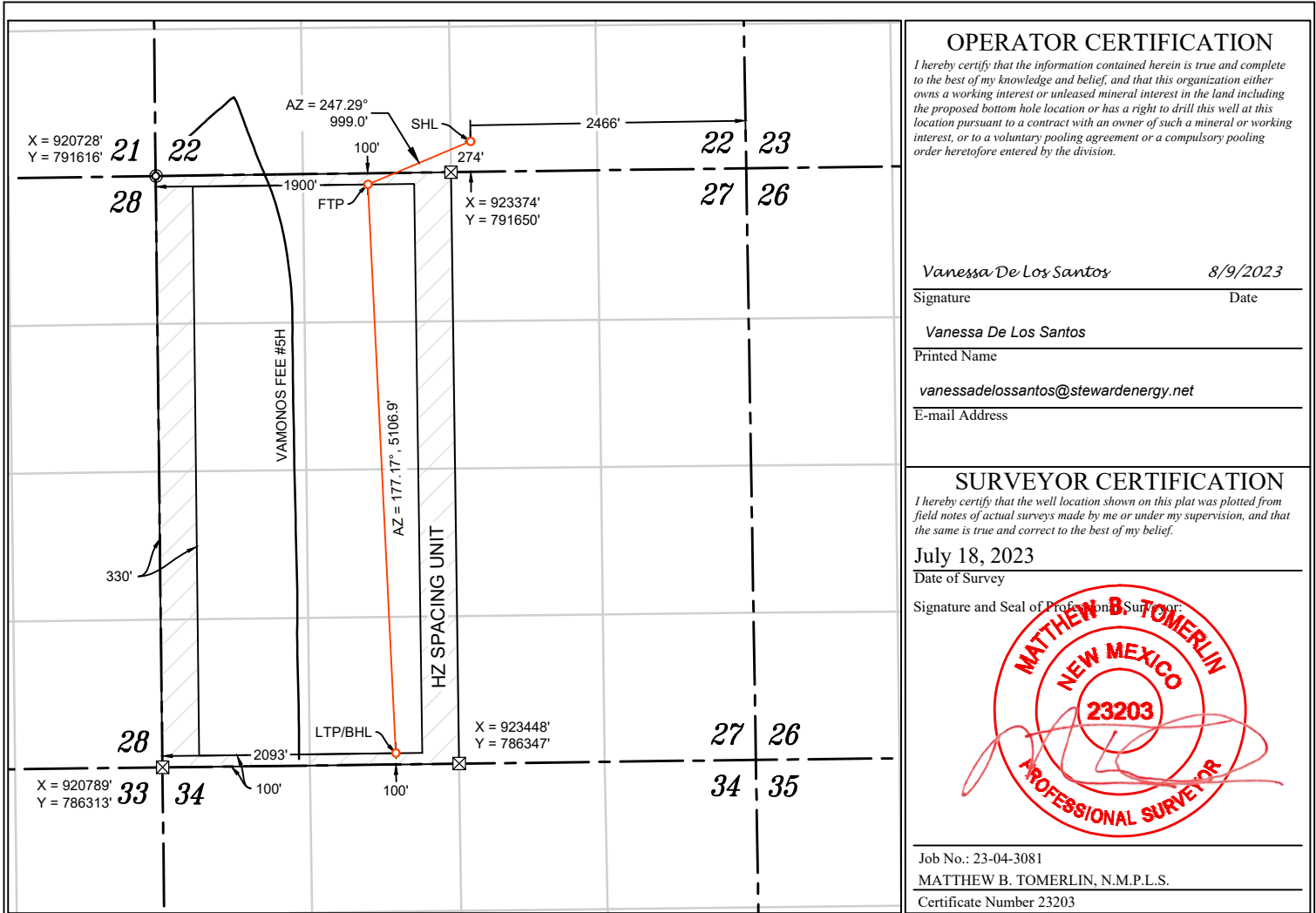
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	22	13 S	38 E		274	SOUTH	2466	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
N	27	13 S	38 E		100	SOUTH	2093	WEST	LEA
Dedicated Acres 320.0		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.



NAD 83 (SHL) 274' FSL & 2466' FEL LATITUDE = 33.170710° LONGITUDE = -103.084249° NAD 27 (SURFACE HOLE LOCATION) LATITUDE = 33.170603° LONGITUDE = -103.083750° STATE PLANE NAD 83 (N.M. EAST) N: 791925.81' E: 923550.64' STATE PLANE NAD 27 (N.M. EAST) N: 791863.13' E: 882374.69'	NAD 83 (FTP) 100' FNL & 1900' FWL LATITUDE = 33.169681° LONGITUDE = -103.087275° NAD 27 (FTP) 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'	NAD 83 (LTP/BHL) 100' FSL & 2093' FWL LATITUDE = 33.155657° LONGITUDE = -103.086651° NAD 27 (LTP/BHL) 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'
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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

1. 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.
2. THIS DOCUMENT IS BASED UPON AN ON THE GROUND SURVEY PERFORMED DURING JULY, 2023. CERTIFICATION OF THIS DOCUMENT IS ONLY TO THE LOCATION OF THIS EASEMENT IN RELATION TO RECORDED MONUMENT OF DEEDS PROVIDED BY THE CLIENT.
3. ELEVATIONS MSL, DERIVED FROM G.N.S.S. OBSERVATION AND DERIVED FROM SAID ON-THE-GROUND SURVEY.

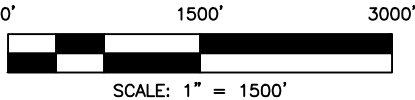


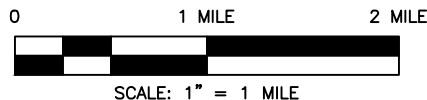
EXHIBIT 1 LOCATION & ELEVATION VERIFICATION MAP



LEASE NAME AND WELL NUMBER: VAMONOS FEE #4H
 LATITUDE: N 33.170710 LONGITUDE: W 103.084249 ELEVATION: 3802'
 DESCRIPTION: 274' FSL & 2466' FEL



Situated in
 SECTION 22, TOWNSHIP 13 SOUTH, RANGE 38 EAST
 LEA COUNTY, NEW MEXICO



LEGEND

- SHL
- KOP/FTP/PPP/LTP/BHL
- 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: 07/19/2023

REV.

CHECKED BY: JW

DATE: 07/19/2023

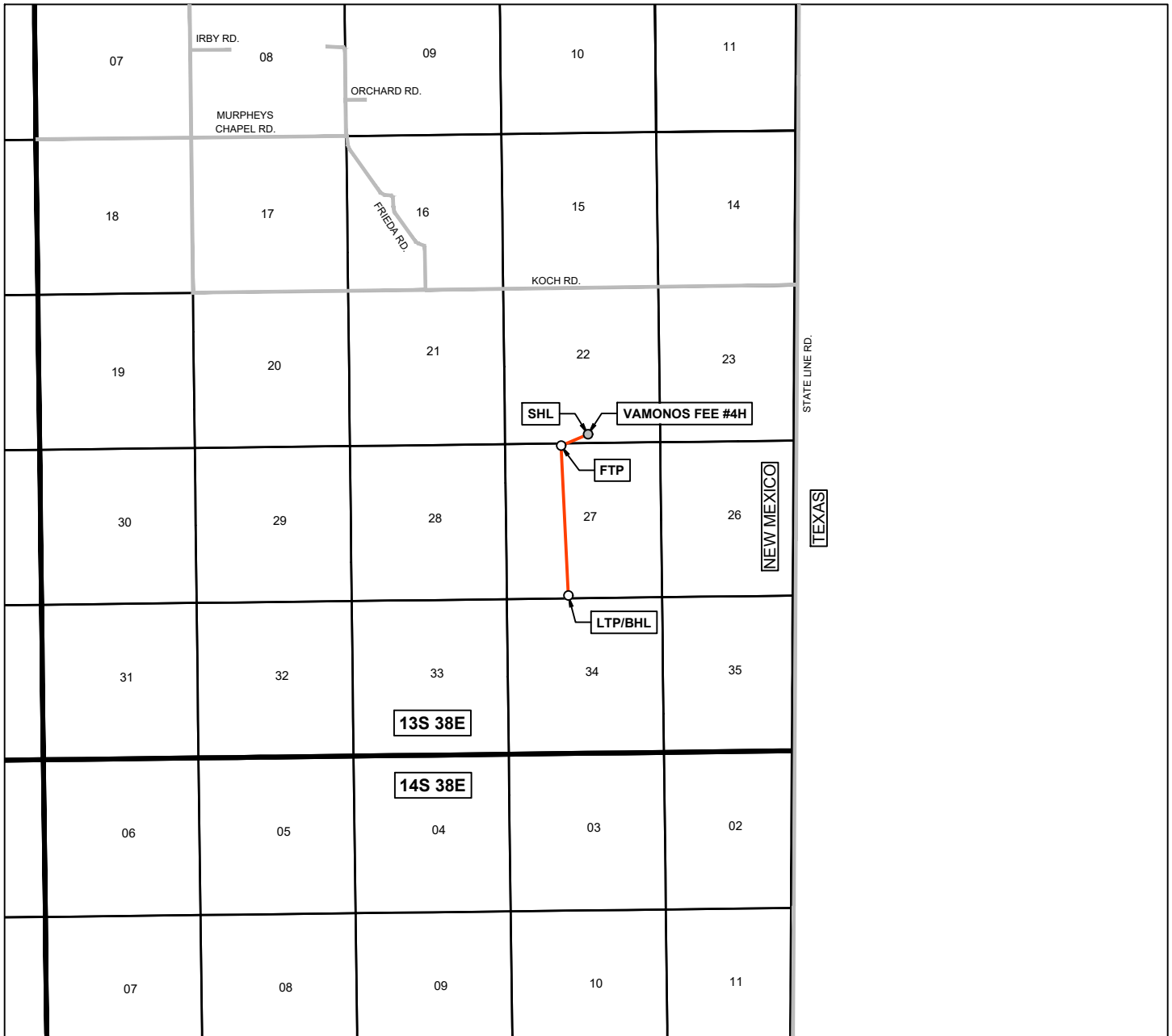
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AFE #

PROJECT ID: 23-04-3081

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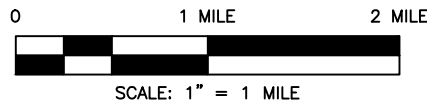
EXHIBIT 2 VICINITY MAP



LEASE NAME AND WELL NUMBER: VAMONOS FEE #4H
 LATITUDE: N 33.170710 LONGITUDE: W 103.084249 ELEVATION: 3802'
 DESCRIPTION: 274' FSL & 2466' FEL

LEGEND

- SHL
- KOP/FTP/PPP/LTP/BHL
- EXISTING ROADS
- PROPOSED WELL BORE
- SECTION LINE
- TOWNSHIP/RANGE LINE



Situated in
 SECTION 22, TOWNSHIP 13 SOUTH, RANGE 38 EAST
 LEA COUNTY, NEW MEXICO

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

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REV.

CHECKED BY: JH

DATE : 07/19/2023

1

AFE #

PROJECT ID: 23-04-3081

PAGE 1 OF 1

DATAPOINT
 SURVEYING & MAPPING

Steward Energy II, LLC

DrilTech, LLC

Steward Energy II, LLC

Vamonos Fee 4H Wellbore #1 Plan #3



SURFACE LOCATION

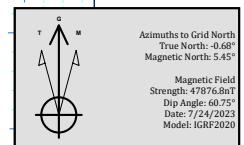
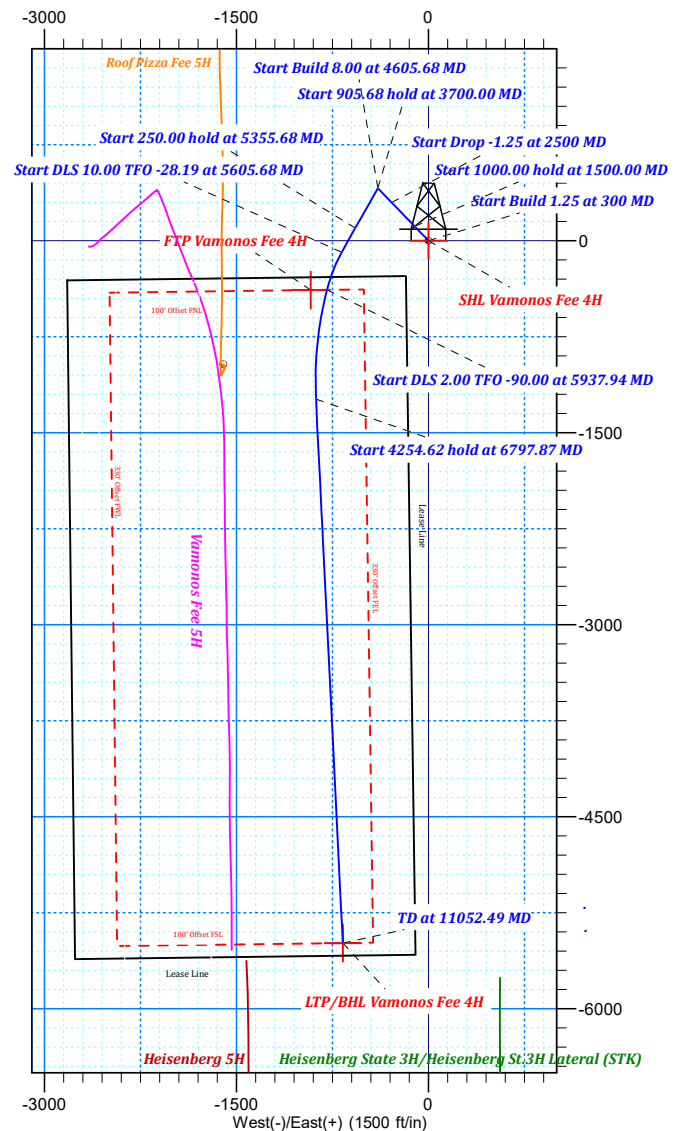
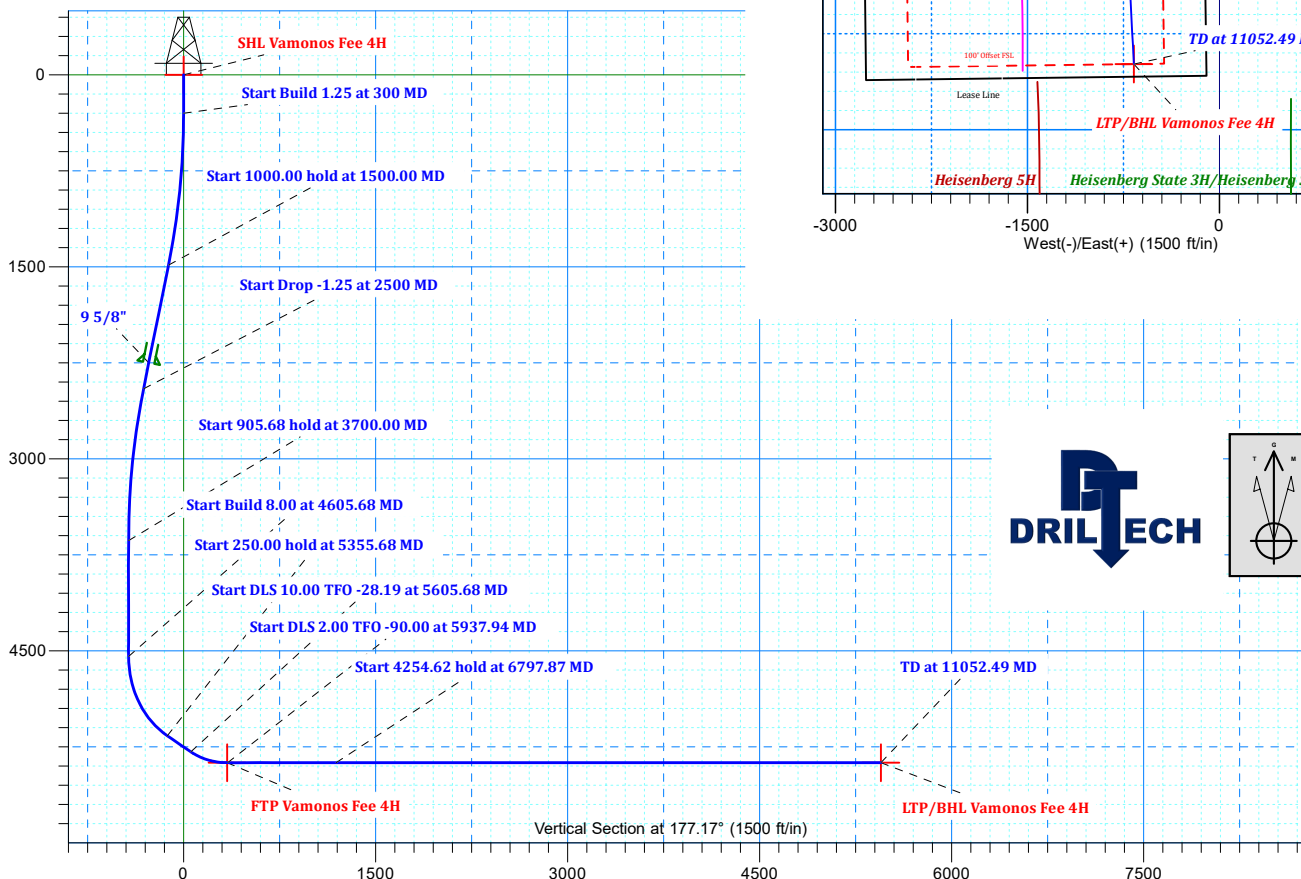
US State Plane 1983 New Mexico Eastern Zone			
Elevation: GL 3802' + RKB 19' @ 3821.00ft			
Northing 791925.81	Easting 923550.64	Latitude 33.171°N	Longitude 103.084°W

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	
SHL Vamonos Fee 4H	0.00	0.00	0.00	791925.81	9
FTP Vamonos Fee 4H	5375.00	-385.63	-921.56	791540.18	9
LTP/BHL Vamonos Fee 4H	5375.00	-5486.29	-669.80	786439.53	9

LATERAL SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSec
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
1500.00	15.00	316.00	1486.34	112.35	-108.49	1.25	-117.57
2500.00	15.00	316.00	2452.26	298.53	-288.29	0.00	-312.40
3700.00	0.00	0.00	3638.60	410.88	-396.78	1.25	-429.97
4605.68	0.00	0.00	4544.28	410.88	-396.78	0.00	-429.97
5355.68	60.00	209.37	5164.53	98.81	-572.41	8.00	-126.95
5605.68	60.00	209.37	5289.53	-89.87	-678.59	0.00	56.26
5937.94	90.00	194.37	5375.00	-384.49	-793.63	10.00	344.84
6797.87	90.00	177.17	5375.00	-1236.86	-879.77	2.00	1191.91
11052.49	90.00	177.17	5375.00	-5486.29	-669.80	0.00	5446.53



Steward Energy II, LLC

Lea County, NM (NAD 83) NM East Zone

Vamonos Fee 4H

Vamonos Fee 4H

Wellbore #1

Plan: Plan #3

Standard Planning Report

24 July, 2023

Planning Report

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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:	791,925.81 usft	Latitude: 33.171°N
From:	Map	Easting:	923,550.64 usft	Longitude: 103.084°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	

Well	Vamonos Fee 4H			
Well Position	+N/-S	0.00 ft	Northing:	791,925.81 usft
	+E/-W	0.00 ft	Easting:	923,550.64 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft
Grid Convergence:		0.68 °	Ground Level:	3,802.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/24/2023	6.14	60.75	47,876.82617057

Design	Plan #3			
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	177.17

Plan Survey Tool Program	Date	7/24/2023		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	11,052.49	Plan #3 (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 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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	
1,500.00	15.00	316.00	1,486.34	112.35	-108.49	1.25	1.25	0.00	316.00	
2,500.00	15.00	316.00	2,452.26	298.53	-288.29	0.00	0.00	0.00	0.00	
3,700.00	0.00	0.00	3,638.60	410.88	-396.78	1.25	-1.25	0.00	180.00	
4,605.68	0.00	0.00	4,544.28	410.88	-396.78	0.00	0.00	0.00	0.00	
5,355.68	60.00	209.37	5,164.53	98.81	-572.41	8.00	8.00	0.00	209.37	
5,605.68	60.00	209.37	5,289.53	-89.87	-678.59	0.00	0.00	0.00	0.00	
5,937.94	90.00	194.37	5,375.00	-384.49	-793.63	10.00	9.03	-4.51	-28.19	
6,797.87	90.00	177.17	5,375.00	-1,236.86	-879.77	2.00	0.00	-2.00	-90.00	
11,052.49	90.00	177.17	5,375.00	-5,486.29	-669.80	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 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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 1.25 at 300 MD									
400.00	1.25	316.00	399.99	0.78	-0.76	-0.82	1.25	1.25	0.00
500.00	2.50	316.00	499.94	3.14	-3.03	-3.28	1.25	1.25	0.00
600.00	3.75	316.00	599.79	7.06	-6.82	-7.39	1.25	1.25	0.00
700.00	5.00	316.00	699.49	12.55	-12.12	-13.13	1.25	1.25	0.00
800.00	6.25	316.00	799.01	19.60	-18.93	-20.51	1.25	1.25	0.00
900.00	7.50	316.00	898.29	28.21	-27.24	-29.52	1.25	1.25	0.00
1,000.00	8.75	316.00	997.28	38.37	-37.06	-40.16	1.25	1.25	0.00
1,100.00	10.00	316.00	1,095.94	50.09	-48.37	-52.42	1.25	1.25	0.00
1,200.00	11.25	316.00	1,194.23	63.35	-61.18	-66.30	1.25	1.25	0.00
1,300.00	12.50	316.00	1,292.09	78.16	-75.48	-81.79	1.25	1.25	0.00
1,400.00	13.75	316.00	1,389.47	94.49	-91.25	-98.88	1.25	1.25	0.00
1,500.00	15.00	316.00	1,486.34	112.35	-108.49	-117.57	1.25	1.25	0.00
Start 1000.00 hold at 1500.00 MD									
1,600.00	15.00	316.00	1,582.93	130.97	-126.47	-137.05	0.00	0.00	0.00
1,700.00	15.00	316.00	1,679.52	149.59	-144.45	-156.54	0.00	0.00	0.00
1,800.00	15.00	316.00	1,776.12	168.20	-162.43	-176.02	0.00	0.00	0.00
1,900.00	15.00	316.00	1,872.71	186.82	-180.41	-195.50	0.00	0.00	0.00
2,000.00	15.00	316.00	1,969.30	205.44	-198.39	-214.98	0.00	0.00	0.00
2,100.00	15.00	316.00	2,065.89	224.06	-216.37	-234.47	0.00	0.00	0.00
2,200.00	15.00	316.00	2,162.49	242.67	-234.35	-253.95	0.00	0.00	0.00
2,290.60	15.00	316.00	2,250.00	259.54	-250.64	-271.60	0.00	0.00	0.00
9 5/8"									
2,300.00	15.00	316.00	2,259.08	261.29	-252.33	-273.43	0.00	0.00	0.00
2,400.00	15.00	316.00	2,355.67	279.91	-270.31	-292.92	0.00	0.00	0.00
2,500.00	15.00	316.00	2,452.26	298.53	-288.29	-312.40	0.00	0.00	0.00
Start Drop -1.25 at 2500 MD									
2,600.00	13.75	316.00	2,549.13	316.39	-305.53	-331.09	1.25	-1.25	0.00
2,700.00	12.50	316.00	2,646.52	332.72	-321.31	-348.18	1.25	-1.25	0.00
2,800.00	11.25	316.00	2,744.38	347.52	-335.60	-363.67	1.25	-1.25	0.00
2,900.00	10.00	316.00	2,842.66	360.79	-348.41	-377.55	1.25	-1.25	0.00
3,000.00	8.75	316.00	2,941.32	372.50	-359.72	-389.81	1.25	-1.25	0.00
3,100.00	7.50	316.00	3,040.32	382.67	-369.54	-400.45	1.25	-1.25	0.00
3,200.00	6.25	316.00	3,139.60	391.28	-377.86	-409.46	1.25	-1.25	0.00
3,300.00	5.00	316.00	3,239.11	398.33	-384.66	-416.84	1.25	-1.25	0.00
3,400.00	3.75	316.00	3,338.82	403.82	-389.96	-422.58	1.25	-1.25	0.00
3,500.00	2.50	316.00	3,438.67	407.74	-393.75	-426.68	1.25	-1.25	0.00
3,600.00	1.25	316.00	3,538.61	410.09	-396.02	-429.15	1.25	-1.25	0.00
3,700.00	0.00	0.00	3,638.60	410.88	-396.78	-429.97	1.25	-1.25	0.00
Start 905.68 hold at 3700.00 MD									
3,800.00	0.00	0.00	3,738.60	410.88	-396.78	-429.97	0.00	0.00	0.00
3,900.00	0.00	0.00	3,838.60	410.88	-396.78	-429.97	0.00	0.00	0.00
4,000.00	0.00	0.00	3,938.60	410.88	-396.78	-429.97	0.00	0.00	0.00
4,100.00	0.00	0.00	4,038.60	410.88	-396.78	-429.97	0.00	0.00	0.00
4,200.00	0.00	0.00	4,138.60	410.88	-396.78	-429.97	0.00	0.00	0.00
4,300.00	0.00	0.00	4,238.60	410.88	-396.78	-429.97	0.00	0.00	0.00
4,400.00	0.00	0.00	4,338.60	410.88	-396.78	-429.97	0.00	0.00	0.00
4,500.00	0.00	0.00	4,438.60	410.88	-396.78	-429.97	0.00	0.00	0.00
4,600.00	0.00	0.00	4,538.60	410.88	-396.78	-429.97	0.00	0.00	0.00
4,605.68	0.00	0.00	4,544.28	410.88	-396.78	-429.97	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 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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)
Start Build 8.00 at 4605.68 MD									
4,700.00	7.55	209.37	4,638.33	405.47	-399.82	-424.72	8.00	8.00	0.00
4,800.00	15.55	209.37	4,736.23	388.04	-409.63	-407.80	8.00	8.00	0.00
4,900.00	23.55	209.37	4,830.39	358.91	-426.03	-379.51	8.00	8.00	0.00
5,000.00	31.55	209.37	4,918.98	318.64	-448.69	-340.41	8.00	8.00	0.00
5,100.00	39.55	209.37	5,000.28	268.02	-477.18	-291.25	8.00	8.00	0.00
5,200.00	47.55	209.37	5,072.70	208.03	-510.94	-233.00	8.00	8.00	0.00
5,300.00	55.55	209.37	5,134.84	139.84	-549.32	-166.79	8.00	8.00	0.00
5,355.68	60.00	209.37	5,164.53	98.81	-572.41	-126.95	8.00	8.00	0.00
Start 250.00 hold at 5355.68 MD									
5,400.00	60.00	209.37	5,186.69	65.35	-591.24	-94.46	0.00	0.00	0.00
5,500.00	60.00	209.37	5,236.69	-10.12	-633.71	-21.18	0.00	0.00	0.00
5,600.00	60.00	209.37	5,286.69	-85.59	-676.18	52.10	0.00	0.00	0.00
5,605.68	60.00	209.37	5,289.53	-89.87	-678.59	56.26	0.00	0.00	0.00
Start DLS 10.00 TFO -28.19 at 5605.68 MD									
5,700.00	68.40	204.59	5,330.56	-165.51	-716.96	129.91	10.00	8.90	-5.06
5,800.00	77.43	200.10	5,359.92	-253.83	-753.18	216.34	10.00	9.04	-4.49
5,900.00	86.54	195.92	5,373.85	-347.89	-783.72	308.78	10.00	9.10	-4.18
5,937.94	90.00	194.37	5,375.00	-384.49	-793.63	344.84	10.00	9.12	-4.10
Start DLS 2.00 TFO -90.00 at 5937.94 MD									
6,000.00	90.00	193.13	5,375.00	-444.77	-808.38	404.32	2.00	0.00	-2.00
6,100.00	90.00	191.13	5,375.00	-542.54	-829.39	500.93	2.00	0.00	-2.00
6,200.00	90.00	189.13	5,375.00	-640.97	-846.97	598.37	2.00	0.00	-2.00
6,300.00	90.00	187.13	5,375.00	-739.96	-861.11	696.55	2.00	0.00	-2.00
6,400.00	90.00	185.13	5,375.00	-839.39	-871.79	795.32	2.00	0.00	-2.00
6,500.00	90.00	183.13	5,375.00	-939.12	-878.99	894.58	2.00	0.00	-2.00
6,600.00	90.00	181.13	5,375.00	-1,039.05	-882.70	994.20	2.00	0.00	-2.00
6,700.00	90.00	179.13	5,375.00	-1,139.04	-882.93	1,094.06	2.00	0.00	-2.00
6,797.87	90.00	177.17	5,375.00	-1,236.86	-879.77	1,191.91	2.00	0.00	-2.00
Start 4254.62 hold at 6797.87 MD									
6,800.00	90.00	177.17	5,375.00	-1,238.98	-879.66	1,194.04	0.00	0.00	0.00
6,900.00	90.00	177.17	5,375.00	-1,338.86	-874.73	1,294.04	0.00	0.00	0.00
7,000.00	90.00	177.17	5,375.00	-1,438.74	-869.79	1,394.04	0.00	0.00	0.00
7,100.00	90.00	177.17	5,375.00	-1,538.62	-864.86	1,494.04	0.00	0.00	0.00
7,200.00	90.00	177.17	5,375.00	-1,638.50	-859.92	1,594.04	0.00	0.00	0.00
7,300.00	90.00	177.17	5,375.00	-1,738.38	-854.99	1,694.04	0.00	0.00	0.00
7,400.00	90.00	177.17	5,375.00	-1,838.25	-850.05	1,794.04	0.00	0.00	0.00
7,500.00	90.00	177.17	5,375.00	-1,938.13	-845.12	1,894.04	0.00	0.00	0.00
7,600.00	90.00	177.17	5,375.00	-2,038.01	-840.18	1,994.04	0.00	0.00	0.00
7,700.00	90.00	177.17	5,375.00	-2,137.89	-835.25	2,094.04	0.00	0.00	0.00
7,800.00	90.00	177.17	5,375.00	-2,237.77	-830.31	2,194.04	0.00	0.00	0.00
7,900.00	90.00	177.17	5,375.00	-2,337.64	-825.38	2,294.04	0.00	0.00	0.00
8,000.00	90.00	177.17	5,375.00	-2,437.52	-820.44	2,394.04	0.00	0.00	0.00
8,100.00	90.00	177.17	5,375.00	-2,537.40	-815.51	2,494.04	0.00	0.00	0.00
8,200.00	90.00	177.17	5,375.00	-2,637.28	-810.57	2,594.04	0.00	0.00	0.00
8,300.00	90.00	177.17	5,375.00	-2,737.16	-805.64	2,694.04	0.00	0.00	0.00
8,400.00	90.00	177.17	5,375.00	-2,837.03	-800.70	2,794.04	0.00	0.00	0.00
8,500.00	90.00	177.17	5,375.00	-2,936.91	-795.77	2,894.04	0.00	0.00	0.00
8,600.00	90.00	177.17	5,375.00	-3,036.79	-790.83	2,994.04	0.00	0.00	0.00
8,700.00	90.00	177.17	5,375.00	-3,136.67	-785.90	3,094.04	0.00	0.00	0.00
8,800.00	90.00	177.17	5,375.00	-3,236.55	-780.96	3,194.04	0.00	0.00	0.00
8,900.00	90.00	177.17	5,375.00	-3,336.43	-776.03	3,294.04	0.00	0.00	0.00
9,000.00	90.00	177.17	5,375.00	-3,436.30	-771.09	3,394.04	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 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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)	
9,100.00	90.00	177.17	5,375.00	-3,536.18	-766.16	3,494.04	0.00	0.00	0.00	
9,200.00	90.00	177.17	5,375.00	-3,636.06	-761.22	3,594.04	0.00	0.00	0.00	
9,300.00	90.00	177.17	5,375.00	-3,735.94	-756.29	3,694.04	0.00	0.00	0.00	
9,400.00	90.00	177.17	5,375.00	-3,835.82	-751.35	3,794.04	0.00	0.00	0.00	
9,500.00	90.00	177.17	5,375.00	-3,935.69	-746.42	3,894.04	0.00	0.00	0.00	
9,600.00	90.00	177.17	5,375.00	-4,035.57	-741.48	3,994.04	0.00	0.00	0.00	
9,700.00	90.00	177.17	5,375.00	-4,135.45	-736.55	4,094.04	0.00	0.00	0.00	
9,800.00	90.00	177.17	5,375.00	-4,235.33	-731.61	4,194.04	0.00	0.00	0.00	
9,900.00	90.00	177.17	5,375.00	-4,335.21	-726.68	4,294.04	0.00	0.00	0.00	
10,000.00	90.00	177.17	5,375.00	-4,435.09	-721.74	4,394.04	0.00	0.00	0.00	
10,100.00	90.00	177.17	5,375.00	-4,534.96	-716.81	4,494.04	0.00	0.00	0.00	
10,200.00	90.00	177.17	5,375.00	-4,634.84	-711.87	4,594.04	0.00	0.00	0.00	
10,300.00	90.00	177.17	5,375.00	-4,734.72	-706.94	4,694.04	0.00	0.00	0.00	
10,400.00	90.00	177.17	5,375.00	-4,834.60	-702.00	4,794.04	0.00	0.00	0.00	
10,500.00	90.00	177.17	5,375.00	-4,934.48	-697.07	4,894.04	0.00	0.00	0.00	
10,600.00	90.00	177.17	5,375.00	-5,034.35	-692.13	4,994.04	0.00	0.00	0.00	
10,700.00	90.00	177.17	5,375.00	-5,134.23	-687.20	5,094.04	0.00	0.00	0.00	
10,800.00	90.00	177.17	5,375.00	-5,234.11	-682.26	5,194.04	0.00	0.00	0.00	
10,900.00	90.00	177.17	5,375.00	-5,333.99	-677.33	5,294.04	0.00	0.00	0.00	
11,000.00	90.00	177.17	5,375.00	-5,433.87	-672.39	5,394.04	0.00	0.00	0.00	
11,052.49	90.00	177.17	5,375.00	-5,486.29	-669.80	5,446.53	0.00	0.00	0.00	
TD at 11052.49 MD										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL Vamonos Fee 4H	0.00	0.00	0.00	0.00	0.00	791,925.81	923,550.64	33.171°N	103.084°W
- plan hits target center									
- Point									
LTP/BHL Vamonos Fee 4H	0.00	0.00	5,375.00	-5,486.29	-669.80	786,439.53	922,880.84	33.156°N	103.087°W
- plan hits target center									
- Point									
FTP Vamonos Fee 4H	0.00	0.00	5,375.00	-385.63	-921.56	791,540.18	922,629.08	33.170°N	103.087°W
- plan misses target center by 123.83ft at 5969.45ft MD (5375.00 TVD, -415.06 N, -801.28 E)									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (in)	Hole Diameter (in)
2,290.60	2,250.00	9 5/8"		9.625	12.250

Planning Report

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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 1.25 at 300 MD	
1,500.00	1,486.34	112.35	-108.49	Start 1000.00 hold at 1500.00 MD	
2,500.00	2,452.26	298.53	-288.29	Start Drop -1.25 at 2500 MD	
3,700.00	3,638.60	410.88	-396.78	Start 905.68 hold at 3700.00 MD	
4,605.68	4,544.28	410.88	-396.78	Start Build 8.00 at 4605.68 MD	
5,355.68	5,164.53	98.81	-572.41	Start 250.00 hold at 5355.68 MD	
5,605.68	5,289.53	-89.87	-678.59	Start DLS 10.00 TFO -28.19 at 5605.68 MD	
5,937.94	5,375.00	-384.49	-793.63	Start DLS 2.00 TFO -90.00 at 5937.94 MD	
6,797.87	5,374.26	-1,236.86	-879.77	Start 4254.62 hold at 6797.87 MD	
11,052.49	5,367.00	-5,486.28	-669.80	TD at 11052.49 MD	

Steward Energy II, LLC

Lea County, NM (NAD 83) NM East Zone

Vamonos Fee 4H

Vamonos Fee 4H

Wellbore #1

Plan: Plan #3

Standard Planning Report - Geographic

24 July, 2023

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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:	791,925.81 usft	Latitude:	33.171°N
From:	Map	Easting:	923,550.64 usft	Longitude:	103.084°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in		

Well	Vamonos Fee 4H					
Well Position	+N/-S	0.00 ft	Northing:	791,925.81 usft	Latitude:	33.171°N
	+E/-W	0.00 ft	Easting:	923,550.64 usft	Longitude:	103.084°W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,802.00 ft
Grid Convergence:		0.68 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/24/2023	6.14	60.75	47,876.82617057

Design	Plan #3			
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	177.17

Plan Survey Tool Program	Date	7/24/2023		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	11,052.49 Plan #3 (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 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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	
1,500.00	15.00	316.00	1,486.34	112.35	-108.49	1.25	1.25	0.00	316.00	
2,500.00	15.00	316.00	2,452.26	298.53	-288.29	0.00	0.00	0.00	0.00	
3,700.00	0.00	0.00	3,638.60	410.88	-396.78	1.25	-1.25	0.00	180.00	
4,605.68	0.00	0.00	4,544.28	410.88	-396.78	0.00	0.00	0.00	0.00	
5,355.68	60.00	209.37	5,164.53	98.81	-572.41	8.00	8.00	0.00	209.37	
5,605.68	60.00	209.37	5,289.53	-89.87	-678.59	0.00	0.00	0.00	0.00	
5,937.94	90.00	194.37	5,375.00	-384.49	-793.63	10.00	9.03	-4.51	-28.19	
6,797.87	90.00	177.17	5,375.00	-1,236.86	-879.77	2.00	0.00	-2.00	-90.00	
11,052.49	90.00	177.17	5,375.00	-5,486.29	-669.80	0.00	0.00	0.00	0.00	LTP/BHL Vamonos F€

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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	791,925.81	923,550.64	33.171°N	103.084°W
100.00	0.00	0.00	100.00	0.00	0.00	791,925.81	923,550.64	33.171°N	103.084°W
200.00	0.00	0.00	200.00	0.00	0.00	791,925.81	923,550.64	33.171°N	103.084°W
300.00	0.00	0.00	300.00	0.00	0.00	791,925.81	923,550.64	33.171°N	103.084°W
Start Build 1.25 at 300 MD									
400.00	1.25	316.00	399.99	0.78	-0.76	791,926.59	923,549.88	33.171°N	103.084°W
500.00	2.50	316.00	499.94	3.14	-3.03	791,928.95	923,547.61	33.171°N	103.084°W
600.00	3.75	316.00	599.79	7.06	-6.82	791,932.87	923,543.82	33.171°N	103.084°W
700.00	5.00	316.00	699.49	12.55	-12.12	791,938.35	923,538.52	33.171°N	103.084°W
800.00	6.25	316.00	799.01	19.60	-18.93	791,945.41	923,531.72	33.171°N	103.084°W
900.00	7.50	316.00	898.29	28.21	-27.24	791,954.02	923,523.40	33.171°N	103.084°W
1,000.00	8.75	316.00	997.28	38.37	-37.06	791,964.18	923,513.58	33.171°N	103.084°W
1,100.00	10.00	316.00	1,095.94	50.09	-48.37	791,975.90	923,502.27	33.171°N	103.084°W
1,200.00	11.25	316.00	1,194.23	63.35	-61.18	791,989.16	923,489.46	33.171°N	103.084°W
1,300.00	12.50	316.00	1,292.09	78.16	-75.48	792,003.96	923,475.17	33.171°N	103.084°W
1,400.00	13.75	316.00	1,389.47	94.49	-91.25	792,020.30	923,459.39	33.171°N	103.085°W
1,500.00	15.00	316.00	1,486.34	112.35	-108.49	792,038.16	923,442.15	33.171°N	103.085°W
Start 1000.00 hold at 1500.00 MD									
1,600.00	15.00	316.00	1,582.93	130.97	-126.47	792,056.78	923,424.17	33.171°N	103.085°W
1,700.00	15.00	316.00	1,679.52	149.59	-144.45	792,075.39	923,406.19	33.171°N	103.085°W
1,800.00	15.00	316.00	1,776.12	168.20	-162.43	792,094.01	923,388.21	33.171°N	103.085°W
1,900.00	15.00	316.00	1,872.71	186.82	-180.41	792,112.63	923,370.23	33.171°N	103.085°W
2,000.00	15.00	316.00	1,969.30	205.44	-198.39	792,131.25	923,352.25	33.171°N	103.085°W
2,100.00	15.00	316.00	2,065.89	224.06	-216.37	792,149.86	923,334.27	33.171°N	103.085°W
2,200.00	15.00	316.00	2,162.49	242.67	-234.35	792,168.48	923,316.29	33.171°N	103.085°W
2,290.60	15.00	316.00	2,250.00	259.54	-250.64	792,185.35	923,300.00	33.171°N	103.085°W
9 5/8"									
2,300.00	15.00	316.00	2,259.08	261.29	-252.33	792,187.10	923,298.31	33.171°N	103.085°W
2,400.00	15.00	316.00	2,355.67	279.91	-270.31	792,205.72	923,280.33	33.171°N	103.085°W
2,500.00	15.00	316.00	2,452.26	298.53	-288.29	792,224.34	923,262.36	33.172°N	103.085°W
Start Drop -1.25 at 2500 MD									
2,600.00	13.75	316.00	2,549.13	316.39	-305.53	792,242.19	923,245.11	33.172°N	103.085°W
2,700.00	12.50	316.00	2,646.52	332.72	-321.31	792,258.53	923,229.34	33.172°N	103.085°W
2,800.00	11.25	316.00	2,744.38	347.52	-335.60	792,273.33	923,215.04	33.172°N	103.085°W
2,900.00	10.00	316.00	2,842.66	360.79	-348.41	792,286.59	923,202.23	33.172°N	103.085°W
3,000.00	8.75	316.00	2,941.32	372.50	-359.72	792,298.31	923,190.92	33.172°N	103.085°W
3,100.00	7.50	316.00	3,040.32	382.67	-369.54	792,308.48	923,181.10	33.172°N	103.085°W
3,200.00	6.25	316.00	3,139.60	391.28	-377.86	792,317.09	923,172.79	33.172°N	103.085°W
3,300.00	5.00	316.00	3,239.11	398.33	-384.66	792,324.14	923,165.98	33.172°N	103.085°W
3,400.00	3.75	316.00	3,338.82	403.82	-389.96	792,329.63	923,160.68	33.172°N	103.086°W
3,500.00	2.50	316.00	3,438.67	407.74	-393.75	792,333.55	923,156.89	33.172°N	103.086°W
3,600.00	1.25	316.00	3,538.61	410.09	-396.02	792,335.90	923,154.62	33.172°N	103.086°W
3,700.00	0.00	0.00	3,638.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
Start 905.68 hold at 3700.00 MD									
3,800.00	0.00	0.00	3,738.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
3,900.00	0.00	0.00	3,838.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
4,000.00	0.00	0.00	3,938.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
4,100.00	0.00	0.00	4,038.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
4,200.00	0.00	0.00	4,138.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
4,300.00	0.00	0.00	4,238.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
4,400.00	0.00	0.00	4,338.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
4,500.00	0.00	0.00	4,438.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
4,600.00	0.00	0.00	4,538.60	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,605.68	0.00	0.00	4,544.28	410.88	-396.78	792,336.69	923,153.86	33.172°N	103.086°W
Start Build 8.00 at 4605.68 MD									
4,700.00	7.55	209.37	4,638.33	405.47	-399.82	792,331.28	923,150.82	33.172°N	103.086°W
4,800.00	15.55	209.37	4,736.23	388.04	-409.63	792,313.85	923,141.01	33.172°N	103.086°W
4,900.00	23.55	209.37	4,830.39	358.91	-426.03	792,284.72	923,124.62	33.172°N	103.086°W
5,000.00	31.55	209.37	4,918.98	318.64	-448.69	792,244.45	923,101.95	33.172°N	103.086°W
5,100.00	39.55	209.37	5,000.28	268.02	-477.18	792,193.83	923,073.46	33.171°N	103.086°W
5,200.00	47.55	209.37	5,072.70	208.03	-510.94	792,133.84	923,039.70	33.171°N	103.086°W
5,300.00	55.55	209.37	5,134.84	139.84	-549.32	792,065.65	923,001.33	33.171°N	103.086°W
5,355.68	60.00	209.37	5,164.53	98.81	-572.41	792,024.61	922,978.23	33.171°N	103.086°W
Start 250.00 hold at 5355.68 MD									
5,400.00	60.00	209.37	5,186.69	65.35	-591.24	791,991.16	922,959.41	33.171°N	103.086°W
5,500.00	60.00	209.37	5,236.69	-10.12	-633.71	791,915.69	922,916.93	33.171°N	103.086°W
5,600.00	60.00	209.37	5,286.69	-85.59	-676.18	791,840.22	922,874.46	33.170°N	103.086°W
5,605.68	60.00	209.37	5,289.53	-89.87	-678.59	791,835.93	922,872.05	33.170°N	103.086°W
Start DLS 10.00 TFO -28.19 at 5605.68 MD									
5,700.00	68.40	204.59	5,330.56	-165.51	-716.96	791,760.30	922,833.68	33.170°N	103.087°W
5,800.00	77.43	200.10	5,359.92	-253.83	-753.18	791,671.97	922,797.46	33.170°N	103.087°W
5,900.00	86.54	195.92	5,373.85	-347.89	-783.72	791,577.91	922,766.92	33.170°N	103.087°W
5,937.94	90.00	194.37	5,375.00	-384.49	-793.63	791,541.32	922,757.01	33.170°N	103.087°W
Start DLS 2.00 TFO -90.00 at 5937.94 MD									
6,000.00	90.00	193.13	5,375.00	-444.77	-808.38	791,481.03	922,742.26	33.170°N	103.087°W
6,100.00	90.00	191.13	5,375.00	-542.54	-829.39	791,383.27	922,721.25	33.169°N	103.087°W
6,200.00	90.00	189.13	5,375.00	-640.97	-846.97	791,284.84	922,703.67	33.169°N	103.087°W
6,300.00	90.00	187.13	5,375.00	-739.96	-861.11	791,185.85	922,689.53	33.169°N	103.087°W
6,400.00	90.00	185.13	5,375.00	-839.39	-871.79	791,086.42	922,678.85	33.168°N	103.087°W
6,500.00	90.00	183.13	5,375.00	-939.12	-878.99	790,986.69	922,671.65	33.168°N	103.087°W
6,600.00	90.00	181.13	5,375.00	-1,039.05	-882.70	790,886.76	922,667.94	33.168°N	103.087°W
6,700.00	90.00	179.13	5,375.00	-1,139.04	-882.93	790,786.77	922,667.72	33.168°N	103.087°W
6,797.87	90.00	177.17	5,375.00	-1,236.86	-879.77	790,688.95	922,670.87	33.167°N	103.087°W
Start 4254.62 hold at 6797.87 MD									
6,800.00	90.00	177.17	5,375.00	-1,238.98	-879.66	790,686.83	922,670.98	33.167°N	103.087°W
6,900.00	90.00	177.17	5,375.00	-1,338.86	-874.73	790,586.95	922,675.91	33.167°N	103.087°W
7,000.00	90.00	177.17	5,375.00	-1,438.74	-869.79	790,487.07	922,680.85	33.167°N	103.087°W
7,100.00	90.00	177.17	5,375.00	-1,538.62	-864.86	790,387.19	922,685.78	33.167°N	103.087°W
7,200.00	90.00	177.17	5,375.00	-1,638.50	-859.92	790,287.31	922,690.72	33.166°N	103.087°W
7,300.00	90.00	177.17	5,375.00	-1,738.38	-854.99	790,187.44	922,695.65	33.166°N	103.087°W
7,400.00	90.00	177.17	5,375.00	-1,838.25	-850.05	790,087.56	922,700.59	33.166°N	103.087°W
7,500.00	90.00	177.17	5,375.00	-1,938.13	-845.12	789,987.68	922,705.52	33.165°N	103.087°W
7,600.00	90.00	177.17	5,375.00	-2,038.01	-840.18	789,887.80	922,710.46	33.165°N	103.087°W
7,700.00	90.00	177.17	5,375.00	-2,137.89	-835.25	789,787.92	922,715.39	33.165°N	103.087°W
7,800.00	90.00	177.17	5,375.00	-2,237.77	-830.31	789,688.05	922,720.33	33.165°N	103.087°W
7,900.00	90.00	177.17	5,375.00	-2,337.64	-825.38	789,588.17	922,725.26	33.164°N	103.087°W
8,000.00	90.00	177.17	5,375.00	-2,437.52	-820.44	789,488.29	922,730.20	33.164°N	103.087°W
8,100.00	90.00	177.17	5,375.00	-2,537.40	-815.51	789,388.41	922,735.13	33.164°N	103.087°W
8,200.00	90.00	177.17	5,375.00	-2,637.28	-810.57	789,288.53	922,740.07	33.163°N	103.087°W
8,300.00	90.00	177.17	5,375.00	-2,737.16	-805.64	789,188.66	922,745.00	33.163°N	103.087°W
8,400.00	90.00	177.17	5,375.00	-2,837.03	-800.70	789,088.78	922,749.94	33.163°N	103.087°W
8,500.00	90.00	177.17	5,375.00	-2,936.91	-795.77	788,988.90	922,754.87	33.163°N	103.087°W
8,600.00	90.00	177.17	5,375.00	-3,036.79	-790.83	788,889.02	922,759.81	33.162°N	103.087°W
8,700.00	90.00	177.17	5,375.00	-3,136.67	-785.90	788,789.14	922,764.74	33.162°N	103.087°W
8,800.00	90.00	177.17	5,375.00	-3,236.55	-780.96	788,689.27	922,769.68	33.162°N	103.087°W
8,900.00	90.00	177.17	5,375.00	-3,336.43	-776.03	788,589.39	922,774.61	33.162°N	103.087°W
9,000.00	90.00	177.17	5,375.00	-3,436.30	-771.09	788,489.51	922,779.55	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 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,100.00	90.00	177.17	5,375.00	-3,536.18	-766.16	788,389.63	922,784.49	33.161°N	103.087°W
9,200.00	90.00	177.17	5,375.00	-3,636.06	-761.22	788,289.75	922,789.42	33.161°N	103.087°W
9,300.00	90.00	177.17	5,375.00	-3,735.94	-756.29	788,189.88	922,794.36	33.160°N	103.087°W
9,400.00	90.00	177.17	5,375.00	-3,835.82	-751.35	788,090.00	922,799.29	33.160°N	103.087°W
9,500.00	90.00	177.17	5,375.00	-3,935.69	-746.42	787,990.12	922,804.23	33.160°N	103.087°W
9,600.00	90.00	177.17	5,375.00	-4,035.57	-741.48	787,890.24	922,809.16	33.160°N	103.087°W
9,700.00	90.00	177.17	5,375.00	-4,135.45	-736.55	787,790.36	922,814.10	33.159°N	103.087°W
9,800.00	90.00	177.17	5,375.00	-4,235.33	-731.61	787,690.49	922,819.03	33.159°N	103.087°W
9,900.00	90.00	177.17	5,375.00	-4,335.21	-726.68	787,590.61	922,823.97	33.159°N	103.087°W
10,000.00	90.00	177.17	5,375.00	-4,435.09	-721.74	787,490.73	922,828.90	33.159°N	103.087°W
10,100.00	90.00	177.17	5,375.00	-4,534.96	-716.81	787,390.85	922,833.84	33.158°N	103.087°W
10,200.00	90.00	177.17	5,375.00	-4,634.84	-711.87	787,290.98	922,838.77	33.158°N	103.087°W
10,300.00	90.00	177.17	5,375.00	-4,734.72	-706.94	787,191.10	922,843.71	33.158°N	103.087°W
10,400.00	90.00	177.17	5,375.00	-4,834.60	-702.00	787,091.22	922,848.64	33.157°N	103.087°W
10,500.00	90.00	177.17	5,375.00	-4,934.48	-697.07	786,991.34	922,853.58	33.157°N	103.087°W
10,600.00	90.00	177.17	5,375.00	-5,034.35	-692.13	786,891.46	922,858.51	33.157°N	103.087°W
10,700.00	90.00	177.17	5,375.00	-5,134.23	-687.20	786,791.59	922,863.45	33.157°N	103.087°W
10,800.00	90.00	177.17	5,375.00	-5,234.11	-682.26	786,691.71	922,868.38	33.156°N	103.087°W
10,900.00	90.00	177.17	5,375.00	-5,333.99	-677.33	786,591.83	922,873.32	33.156°N	103.087°W
11,000.00	90.00	177.17	5,375.00	-5,433.87	-672.39	786,491.95	922,878.25	33.156°N	103.087°W
11,052.49	90.00	177.17	5,375.00	-5,486.29	-669.80	786,439.53	922,880.84	33.156°N	103.087°W
TD at 11052.49 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	791,925.81	923,550.64	33.171°N	103.084°W	
LTP/BHL Vamonos Fee - plan hits target center - Point	0.00	0.00	5,375.00	-5,486.29	-669.80	786,439.53	922,880.84	33.156°N	103.087°W	
FTP Vamonos Fee 4H - plan misses target center by 123.83ft at 5969.45ft MD (5375.00 TVD, -415.06 N, -801.28 E) - Point	0.00	0.00	5,375.00	-385.63	-921.56	791,540.18	922,629.08	33.170°N	103.087°W	

Casing Points										
Measured Depth (ft)	Vertical Depth (ft)	Name				Casing Diameter (in)	Hole Diameter (in)			
2,290.60	2,250.00	9 5/8"				9.625	12.250			

Planning Report - Geographic

Database:	edmdb	Local Co-ordinate Reference:	Well Vamonos Fee 4H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3802' + RKB 19' @ 3821.00ft
Site:	Vamonos Fee 4H	North Reference:	Grid
Well:	Vamonos Fee 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

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 1.25 at 300 MD	
1,500.00	1,486.34	112.35	-108.49	Start 1000.00 hold at 1500.00 MD	
2,500.00	2,452.26	298.53	-288.29	Start Drop -1.25 at 2500 MD	
3,700.00	3,638.60	410.88	-396.78	Start 905.68 hold at 3700.00 MD	
4,605.68	4,544.28	410.88	-396.78	Start Build 8.00 at 4605.68 MD	
5,355.68	5,164.53	98.81	-572.41	Start 250.00 hold at 5355.68 MD	
5,605.68	5,289.53	-89.87	-678.59	Start DLS 10.00 TFO -28.19 at 5605.68 MD	
5,937.94	5,375.00	-384.49	-793.63	Start DLS 2.00 TFO -90.00 at 5937.94 MD	
6,797.87	5,374.26	-1,236.86	-879.77	Start 4254.62 hold at 6797.87 MD	
11,052.49	5,367.00	-5,486.28	-669.80	TD at 11052.49 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:** 8/9/2023

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	30-025-51639	O-22-13S-38E	274' FSL	500	100	350
			2466' 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	30-025-51639	9/2/2023	9/12/2023	9/15/2023	n/a (no flowback)	10/1/2023

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:
Printed Name: Vanessa De Los Santos
Title: Senior Regulatory Analyst
E-mail Address: vanessa.delossantos@stewardenergy.net
Date: 8/9/23
Phone: 214-297-0500
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Natural Gas Management Plan - Attachment

- VI. Separation equipment will be sized by engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing modelling software to ensure adequate capacity for anticipated production volumes and conditions.
- VII. Steward Energy II, LLC (SEII) will take the following actions to comply with the regulations listed in 19.15.27.8:
 - A. SEII will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. SEII will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, well(s) will be shut in until the natural gas gathering system is available.
 - B. All drilling operations will be equipped with a rig flare located at least 100' from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.
 - C. During completion, SEII does not allow the well to flow during CO so there will be nothing to flare. Immediately following the finish of completion operations. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards. However, if natural gas does not meet gathering pipeline quality specifications, SEII will flare the natural gas for 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. SEII will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will be analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
 - D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(I) through (4). If there is no adequate takeaway for the separator gas, well(s) will be shut in until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be estimated and reported appropriately.
 - E. SEII will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(I) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the

well and storage tanks unless otherwise approved by the division. SEII will conduct AVO (LDAR) inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.

- F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. SEII will install equipment to measure the volume of natural gas flared from existing process piping, or a flowline piped from equipment such as high-pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021, that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, SEII will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

- VIII. For maintenance activities involving production equipment and compression, venting will be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production and compression equipment the associated producing wells will be shut in to eliminate venting. For maintenance of VRUs all gas normally routed to the VRU will be routed to flare to eliminate venting.

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

CONDITIONS

Action 249615

CONDITIONS

Operator: STEWARD ENERGY II, LLC 2600 Dallas Parkway Frisco, TX 75034	OGRID: 371682
	Action Number: 249615
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	10/24/2023