

Steward Energy II, LLC

DrilTech, LLC

Steward Energy II, LLC
Combo Fee 1H
Lateral
Plan #3
Norton 6



SURFACE LOCATION

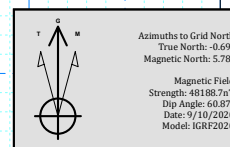
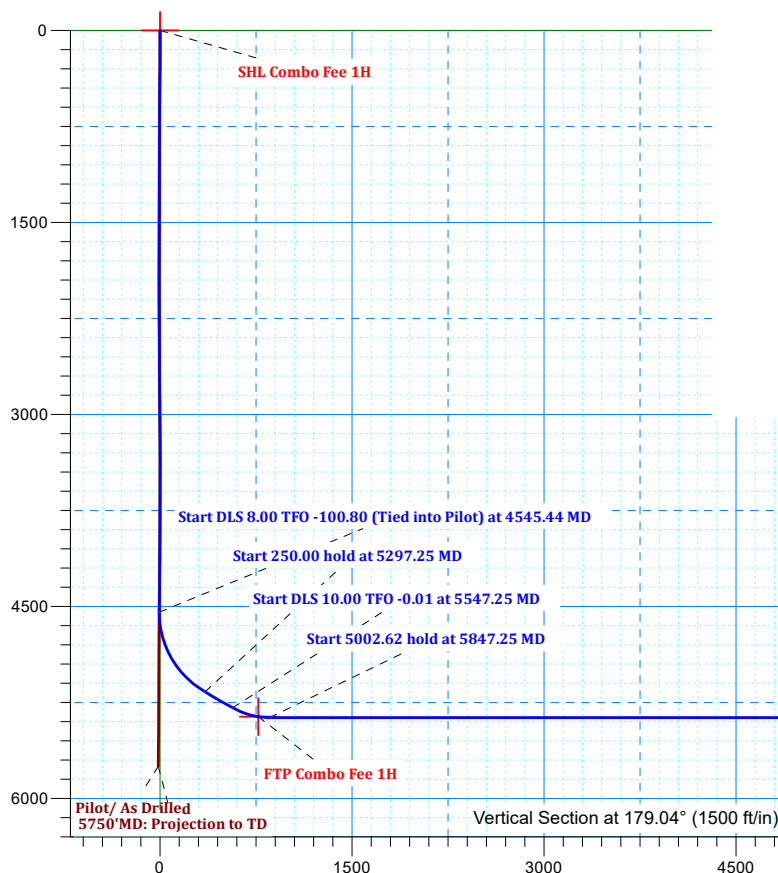
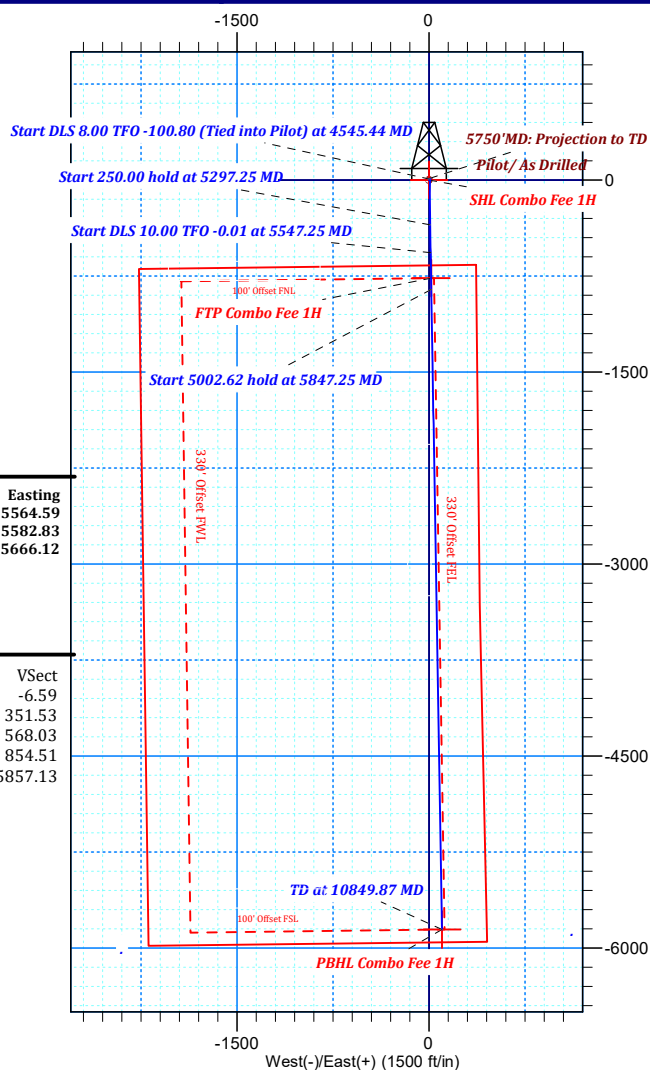
US State Plane 1983
 New Mexico Eastern Zone
 Elevation: GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
 Northing 797631.12 Easting 925564.59 Latitude 33.186 Longitude -103.077

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
SHL Combo Fee 1H	0.00	0.00	0.00	797631.12	925564.59
FTP Combo Fee 1H	5362.29	-766.91	18.24	796864.21	925582.83
PBHL Combo Fee 1H	5369.00	-5856.25	101.53	791774.88	925666.12

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
4545.44	0.79	279.39	4545.22	6.73	8.55	0.00	-6.59
5297.25	60.00	179.04	5167.24	-351.43	8.92	8.00	351.53
5547.25	60.00	179.04	5292.24	-567.90	12.55	0.00	568.03
5847.25	90.00	179.04	5369.00	-854.34	17.36	10.00	854.51
10849.87	90.00	179.04	5369.00	-5856.25	101.53	0.00	5857.13



Steward Energy II, LLC

Lea County, NM (NAD 83) NM East Zone

Combo Fee 1H

Combo Fee 1H

Lateral

Plan: Plan #3

Standard Planning Report

10 September, 2020

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Combo Fee 1H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Site:	Combo Fee 1H	North Reference:	Grid
Well:	Combo Fee 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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	Combo Fee 1H			
Site Position:		Northing:	797,631.12 usft	Latitude: 33.186
From:	Map	Easting:	925,564.59 usft	Longitude: -103.077
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	

Well	Combo Fee 1H			
Well Position	+N/-S	0.00 ft	Northing:	797,631.12 usft
	+E/-W	0.00 ft	Easting:	925,564.59 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft
Grid Convergence:		0.69 °	Ground Level:	3,803.00 ft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	9/10/2020	6.47	60.87	48,188.72469377

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	4,545.44
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	179.04

Plan Survey Tool Program	Date	9/10/2020		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	4,545.44	10,849.87	Plan #3 (Lateral)	MWD
				MWD - Standard

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
4,545.44	0.79	279.39	4,545.22	6.73	8.55	0.00	0.00	0.00	0.00	
5,297.25	60.00	179.04	5,167.24	-351.43	8.92	8.00	7.88	-13.35	-100.80	
5,547.25	60.00	179.04	5,292.24	-567.90	12.55	0.00	0.00	0.00	0.00	
5,847.25	90.00	179.04	5,369.00	-854.34	17.36	10.00	10.00	0.00	-0.01	
10,849.87	90.00	179.04	5,369.00	-5,856.25	101.53	0.00	0.00	0.00	0.00	PBHL Combo Fee 1H

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Combo Fee 1H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Site:	Combo Fee 1H	North Reference:	Grid
Well:	Combo Fee 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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	0.49	73.20	100.00	0.12	0.41	-0.12	0.49	0.49	0.00
200.00	0.68	83.02	199.99	0.37	1.47	-0.34	0.21	0.19	9.82
300.00	0.78	63.44	299.98	0.68	2.68	-0.63	0.26	0.09	-19.58
400.00	1.05	64.97	399.97	1.39	4.11	-1.32	0.28	0.28	1.54
500.00	0.45	25.14	499.96	2.11	5.07	-2.02	0.76	-0.60	-39.83
600.00	0.62	353.02	599.96	3.10	5.14	-3.01	0.34	0.16	-32.12
700.00	0.21	336.09	699.96	3.71	5.03	-3.63	0.42	-0.41	-16.93
800.00	0.35	340.63	799.96	4.14	4.75	-4.06	0.14	0.14	4.53
900.00	0.33	9.79	899.95	4.86	4.85	-4.78	0.17	-0.02	29.17
1,000.00	0.14	265.27	999.95	5.04	4.68	-4.96	0.39	-0.19	-104.52
1,100.00	0.16	28.17	1,099.95	5.05	4.57	-4.97	0.26	0.02	122.90
1,200.00	0.45	356.11	1,199.95	5.61	4.81	-5.53	0.33	0.30	-32.06
1,300.00	0.58	307.91	1,299.94	6.44	4.32	-6.36	0.44	0.13	-48.21
1,400.00	0.57	321.84	1,399.94	6.99	3.47	-6.93	0.14	-0.01	13.93
1,500.00	0.58	308.64	1,499.93	7.84	2.91	-7.79	0.13	0.01	-13.20
1,600.00	0.49	292.77	1,599.93	8.28	2.03	-8.24	0.18	-0.10	-15.87
1,700.00	0.21	214.56	1,699.93	8.34	1.50	-8.32	0.49	-0.27	-78.21
1,800.00	0.30	278.18	1,799.93	8.12	1.22	-8.10	0.28	0.09	63.62
1,900.00	0.41	189.89	1,899.93	7.90	0.84	-7.88	0.51	0.11	-88.29
2,000.00	0.62	140.44	1,999.92	7.10	1.11	-7.08	0.47	0.21	-49.45
2,100.00	0.16	56.46	2,099.92	6.82	1.56	-6.80	0.62	-0.46	-83.98
2,200.00	0.54	157.59	2,199.92	6.40	1.82	-6.37	0.59	0.38	101.13
2,300.00	0.67	121.93	2,299.91	5.58	2.51	-5.54	0.39	0.13	-35.66
2,400.00	0.65	104.40	2,399.90	5.32	3.65	-5.26	0.20	-0.02	-17.53
2,500.00	0.62	117.68	2,499.90	4.88	4.65	-4.81	0.15	-0.03	13.29
2,600.00	0.85	108.78	2,599.89	4.41	5.70	-4.32	0.26	0.23	-8.90
2,700.00	0.77	113.62	2,699.88	3.90	7.41	-3.77	0.10	-0.08	4.84
2,800.00	0.35	153.51	2,799.87	3.34	7.91	-3.21	0.55	-0.43	39.90
2,900.00	0.54	167.40	2,899.87	2.70	8.18	-2.57	0.22	0.19	13.89
3,000.00	0.65	168.89	2,999.86	1.58	8.35	-1.44	0.11	0.10	1.49
3,100.00	0.42	150.92	3,099.86	0.66	8.64	-0.51	0.28	-0.23	-17.97
3,200.00	0.35	146.88	3,199.86	0.15	9.00	0.00	0.07	-0.07	-4.04
3,300.00	0.35	136.06	3,299.86	-0.34	9.36	0.49	0.07	0.00	-10.82
3,400.00	0.43	145.22	3,399.85	-0.84	9.80	1.00	0.10	0.08	9.16
3,500.00	0.17	61.43	3,499.85	-1.13	10.15	1.30	0.44	-0.26	-83.79
3,600.00	0.18	345.22	3,599.85	-0.89	10.24	1.06	0.21	0.01	-76.21
3,700.00	0.25	304.45	3,699.85	-0.61	10.00	0.77	0.16	0.07	-40.77
3,800.00	0.10	319.13	3,799.85	-0.47	9.76	0.64	0.15	-0.15	14.69
3,900.00	0.56	13.02	3,899.85	0.11	9.83	0.06	0.51	0.46	53.89
4,000.00	0.72	18.84	3,999.84	1.19	10.14	-1.02	0.17	0.16	5.82
4,100.00	0.76	19.20	4,099.83	2.43	10.61	-2.26	0.04	0.04	0.36
4,200.00	0.78	18.08	4,199.82	3.67	10.93	-3.48	0.02	0.02	-1.12
4,300.00	0.84	1.87	4,299.81	5.08	11.49	-4.89	0.24	0.06	-16.21
4,400.00	0.89	301.20	4,399.80	6.39	10.64	-6.21	0.87	0.05	-60.67
4,500.00	0.83	275.35	4,499.79	6.65	9.18	-6.50	0.39	-0.06	-25.85
4,545.44	0.79	279.39	4,545.22	6.73	8.55	-6.59	0.16	-0.09	8.89
Start DLS 8.00 TFO -100.80 (Tied into Pilot) at 4545.44 MD									
4,600.00	4.29	189.00	4,599.73	4.78	7.85	-4.65	8.00	6.41	-165.67
4,700.00	12.24	182.17	4,698.62	-9.53	6.87	9.64	8.00	7.95	-6.83
4,800.00	20.23	180.70	4,794.55	-37.46	6.25	37.56	8.00	7.99	-1.47
4,900.00	28.23	180.04	4,885.67	-78.46	6.03	78.55	8.00	8.00	-0.66
5,000.00	36.22	179.65	4,970.19	-131.74	6.19	131.83	8.00	8.00	-0.39
5,100.00	44.22	179.39	5,046.49	-196.26	6.74	196.35	8.00	8.00	-0.26

Planning Report

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Company:	Steward Energy II, LLC	TVD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Site:	Combo Fee 1H	North Reference:	Grid
Well:	Combo Fee 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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)
5,200.00	52.22	179.19	5,113.06	-270.77	7.67	270.86	8.00	8.00	-0.20
5,297.25	60.00	179.04	5,167.24	-351.43	8.92	351.53	8.00	8.00	-0.16
Start 250.00 hold at 5297.25 MD									
5,300.00	60.00	179.04	5,168.62	-353.81	8.96	353.91	0.00	0.00	0.00
5,400.00	60.00	179.04	5,218.62	-440.40	10.41	440.51	0.00	0.00	0.00
5,500.00	60.00	179.04	5,268.62	-526.99	11.86	527.11	0.00	0.00	0.00
5,547.25	60.00	179.04	5,292.24	-567.90	12.55	568.03	0.00	0.00	0.00
Start DLS 10.00 TFO -0.01 at 5547.25 MD									
5,600.00	65.27	179.04	5,316.48	-614.73	13.33	614.86	10.00	10.00	0.00
5,700.00	75.27	179.04	5,350.19	-708.73	14.91	708.88	10.00	10.00	0.00
5,800.00	85.27	179.04	5,367.06	-807.15	16.57	807.31	10.00	10.00	0.00
5,847.25	90.00	179.04	5,369.00	-854.34	17.36	854.51	10.00	10.00	0.00
Start 5002.62 hold at 5847.25 MD									
5,900.00	90.00	179.04	5,369.00	-907.08	18.25	907.26	0.00	0.00	0.00
6,000.00	90.00	179.04	5,369.00	-1,007.07	19.93	1,007.26	0.00	0.00	0.00
6,100.00	90.00	179.04	5,369.00	-1,107.05	21.61	1,107.26	0.00	0.00	0.00
6,200.00	90.00	179.04	5,369.00	-1,207.04	23.29	1,207.26	0.00	0.00	0.00
6,300.00	90.00	179.04	5,369.00	-1,307.03	24.98	1,307.26	0.00	0.00	0.00
6,400.00	90.00	179.04	5,369.00	-1,407.01	26.66	1,407.26	0.00	0.00	0.00
6,500.00	90.00	179.04	5,369.00	-1,507.00	28.34	1,507.26	0.00	0.00	0.00
6,600.00	90.00	179.04	5,369.00	-1,606.98	30.02	1,607.26	0.00	0.00	0.00
6,700.00	90.00	179.04	5,369.00	-1,706.97	31.71	1,707.26	0.00	0.00	0.00
6,800.00	90.00	179.04	5,369.00	-1,806.95	33.39	1,807.26	0.00	0.00	0.00
6,900.00	90.00	179.04	5,369.00	-1,906.94	35.07	1,907.26	0.00	0.00	0.00
7,000.00	90.00	179.04	5,369.00	-2,006.93	36.75	2,007.26	0.00	0.00	0.00
7,100.00	90.00	179.04	5,369.00	-2,106.91	38.44	2,107.26	0.00	0.00	0.00
7,200.00	90.00	179.04	5,369.00	-2,206.90	40.12	2,207.26	0.00	0.00	0.00
7,300.00	90.00	179.04	5,369.00	-2,306.88	41.80	2,307.26	0.00	0.00	0.00
7,400.00	90.00	179.04	5,369.00	-2,406.87	43.48	2,407.26	0.00	0.00	0.00
7,500.00	90.00	179.04	5,369.00	-2,506.86	45.17	2,507.26	0.00	0.00	0.00
7,600.00	90.00	179.04	5,369.00	-2,606.84	46.85	2,607.26	0.00	0.00	0.00
7,700.00	90.00	179.04	5,369.00	-2,706.83	48.53	2,707.26	0.00	0.00	0.00
7,800.00	90.00	179.04	5,369.00	-2,806.81	50.22	2,807.26	0.00	0.00	0.00
7,900.00	90.00	179.04	5,369.00	-2,906.80	51.90	2,907.26	0.00	0.00	0.00
8,000.00	90.00	179.04	5,369.00	-3,006.79	53.58	3,007.26	0.00	0.00	0.00
8,100.00	90.00	179.04	5,369.00	-3,106.77	55.26	3,107.26	0.00	0.00	0.00
8,200.00	90.00	179.04	5,369.00	-3,206.76	56.95	3,207.26	0.00	0.00	0.00
8,300.00	90.00	179.04	5,369.00	-3,306.74	58.63	3,307.26	0.00	0.00	0.00
8,400.00	90.00	179.04	5,369.00	-3,406.73	60.31	3,407.26	0.00	0.00	0.00
8,500.00	90.00	179.04	5,369.00	-3,506.71	61.99	3,507.26	0.00	0.00	0.00
8,600.00	90.00	179.04	5,369.00	-3,606.70	63.68	3,607.26	0.00	0.00	0.00
8,700.00	90.00	179.04	5,369.00	-3,706.69	65.36	3,707.26	0.00	0.00	0.00
8,800.00	90.00	179.04	5,369.00	-3,806.67	67.04	3,807.26	0.00	0.00	0.00
8,900.00	90.00	179.04	5,369.00	-3,906.66	68.72	3,907.26	0.00	0.00	0.00
9,000.00	90.00	179.04	5,369.00	-4,006.64	70.41	4,007.26	0.00	0.00	0.00
9,100.00	90.00	179.04	5,369.00	-4,106.63	72.09	4,107.26	0.00	0.00	0.00
9,200.00	90.00	179.04	5,369.00	-4,206.62	73.77	4,207.26	0.00	0.00	0.00
9,300.00	90.00	179.04	5,369.00	-4,306.60	75.45	4,307.26	0.00	0.00	0.00
9,400.00	90.00	179.04	5,369.00	-4,406.59	77.14	4,407.26	0.00	0.00	0.00
9,500.00	90.00	179.04	5,369.00	-4,506.57	78.82	4,507.26	0.00	0.00	0.00
9,600.00	90.00	179.04	5,369.00	-4,606.56	80.50	4,607.26	0.00	0.00	0.00
9,700.00	90.00	179.04	5,369.00	-4,706.54	82.18	4,707.26	0.00	0.00	0.00
9,800.00	90.00	179.04	5,369.00	-4,806.53	83.87	4,807.26	0.00	0.00	0.00

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well Combo Fee 1H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Site:	Combo Fee 1H	North Reference:	Grid
Well:	Combo Fee 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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)
9,900.00	90.00	179.04	5,369.00	-4,906.52	85.55	4,907.26	0.00	0.00	0.00
10,000.00	90.00	179.04	5,369.00	-5,006.50	87.23	5,007.26	0.00	0.00	0.00
10,100.00	90.00	179.04	5,369.00	-5,106.49	88.91	5,107.26	0.00	0.00	0.00
10,200.00	90.00	179.04	5,369.00	-5,206.47	90.60	5,207.26	0.00	0.00	0.00
10,300.00	90.00	179.04	5,369.00	-5,306.46	92.28	5,307.26	0.00	0.00	0.00
10,400.00	90.00	179.04	5,369.00	-5,406.45	93.96	5,407.26	0.00	0.00	0.00
10,500.00	90.00	179.04	5,369.00	-5,506.43	95.64	5,507.26	0.00	0.00	0.00
10,600.00	90.00	179.04	5,369.00	-5,606.42	97.33	5,607.26	0.00	0.00	0.00
10,700.00	90.00	179.04	5,369.00	-5,706.40	99.01	5,707.26	0.00	0.00	0.00
10,800.00	90.00	179.04	5,369.00	-5,806.39	100.69	5,807.26	0.00	0.00	0.00
10,849.87	90.00	179.04	5,369.00	-5,856.25	101.53	5,857.13	0.00	0.00	0.00
TD at 10849.87 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 Combo Fee 1H - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	797,631.12	925,564.59	33.186	-103.077
FTP Combo Fee 1H - plan misses target center by 2.35ft at 5759.52ft MD (5362.30 TVD, -766.96 N, 15.89 E) - Point	0.00	0.00	5,362.29	-766.91	18.24	796,864.21	925,582.83	33.184	-103.077
PBHL Combo Fee 1H - plan hits target center - Point	0.00	0.00	5,369.00	-5,856.25	101.53	791,774.88	925,666.12	33.170	-103.077

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,545.44	4,545.22	6.73	8.55	Start DLS 8.00 TFO -100.80 (Tied into Pilot) at 4545.44 MD
5,297.25	5,167.24	-351.43	8.92	Start 250.00 hold at 5297.25 MD
5,547.25	5,292.24	-567.90	12.55	Start DLS 10.00 TFO -0.01 at 5547.25 MD
5,847.25	5,369.00	-854.34	17.36	Start 5002.62 hold at 5847.25 MD
10,849.87	5,369.00	-5,856.25	101.53	TD at 10849.87 MD

Steward Energy II, LLC

Lea County, NM (NAD 83) NM East Zone

Combo Fee 1H

Combo Fee 1H

Lateral

Plan: Plan #3

Standard Planning Report - Geographic

10 September, 2020

Planning Report - Geographic

Database:	EDM	Local Co-ordinate Reference:	Well Combo Fee 1H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Site:	Combo Fee 1H	North Reference:	Grid
Well:	Combo Fee 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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	Combo Fee 1H			
Site Position:		Northing:	797,631.12 usft	Latitude: 33.186
From:	Map	Easting:	925,564.59 usft	Longitude: -103.077
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	

Well	Combo Fee 1H			
Well Position	+N/-S	0.00 ft	Northing:	797,631.12 usft
	+E/-W	0.00 ft	Easting:	925,564.59 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft
Grid Convergence:		0.69 °	Ground Level:	3,803.00 ft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	9/10/2020	6.47	60.87	48,188.72469377

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	4,545.44
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	179.04

Plan Survey Tool Program	Date	9/10/2020		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	4,545.44	10,849.87 Plan #3 (Lateral)	MWD	
			MWD - Standard	

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
4,545.44	0.79	279.39	4,545.22	6.73	8.55	0.00	0.00	0.00	0.00	
5,297.25	60.00	179.04	5,167.24	-351.43	8.92	8.00	7.88	-13.35	-100.80	
5,547.25	60.00	179.04	5,292.24	-567.90	12.55	0.00	0.00	0.00	0.00	
5,847.25	90.00	179.04	5,369.00	-854.34	17.36	10.00	10.00	0.00	-0.01	
10,849.87	90.00	179.04	5,369.00	-5,856.25	101.53	0.00	0.00	0.00	0.00	PBHL Combo Fee 1H

Planning Report - Geographic

Database:	EDM	Local Co-ordinate Reference:	Well Combo Fee 1H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Site:	Combo Fee 1H	North Reference:	Grid
Well:	Combo Fee 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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	797,631.12	925,564.59	33.186	-103.077
100.00	0.49	73.20	100.00	0.12	0.41	797,631.24	925,565.00	33.186	-103.077
200.00	0.68	83.02	199.99	0.37	1.47	797,631.48	925,566.06	33.186	-103.077
300.00	0.78	63.44	299.98	0.68	2.68	797,631.79	925,567.27	33.186	-103.077
400.00	1.05	64.97	399.97	1.39	4.11	797,632.51	925,568.70	33.186	-103.077
500.00	0.45	25.14	499.96	2.11	5.07	797,633.22	925,569.67	33.186	-103.077
600.00	0.62	353.02	599.96	3.10	5.14	797,634.22	925,569.73	33.186	-103.077
700.00	0.21	336.09	699.96	3.71	5.03	797,634.83	925,569.62	33.186	-103.077
800.00	0.35	340.63	799.96	4.14	4.75	797,635.26	925,569.34	33.186	-103.077
900.00	0.33	9.79	899.95	4.86	4.85	797,635.98	925,569.45	33.186	-103.077
1,000.00	0.14	265.27	999.95	5.04	4.68	797,636.16	925,569.27	33.186	-103.077
1,100.00	0.16	28.17	1,099.95	5.05	4.57	797,636.17	925,569.16	33.186	-103.077
1,200.00	0.45	356.11	1,199.95	5.61	4.81	797,636.73	925,569.41	33.186	-103.077
1,300.00	0.58	307.91	1,299.94	6.44	4.32	797,637.56	925,568.91	33.186	-103.077
1,400.00	0.57	321.84	1,399.94	6.99	3.47	797,638.11	925,568.06	33.186	-103.077
1,500.00	0.58	308.64	1,499.93	7.84	2.91	797,638.95	925,567.50	33.186	-103.077
1,600.00	0.49	292.77	1,599.93	8.28	2.03	797,639.40	925,566.62	33.186	-103.077
1,700.00	0.21	214.56	1,699.93	8.34	1.50	797,639.46	925,566.09	33.186	-103.077
1,800.00	0.30	278.18	1,799.93	8.12	1.22	797,639.24	925,565.81	33.186	-103.077
1,900.00	0.41	189.89	1,899.93	7.90	0.84	797,639.01	925,565.43	33.186	-103.077
2,000.00	0.62	140.44	1,999.92	7.10	1.11	797,638.22	925,565.70	33.186	-103.077
2,100.00	0.16	56.46	2,099.92	6.82	1.56	797,637.94	925,566.15	33.186	-103.077
2,200.00	0.54	157.59	2,199.92	6.40	1.82	797,637.52	925,566.41	33.186	-103.077
2,300.00	0.67	121.93	2,299.91	5.58	2.51	797,636.70	925,567.10	33.186	-103.077
2,400.00	0.65	104.40	2,399.90	5.32	3.65	797,636.44	925,568.24	33.186	-103.077
2,500.00	0.62	117.68	2,499.90	4.88	4.65	797,636.00	925,569.24	33.186	-103.077
2,600.00	0.85	108.78	2,599.89	4.41	5.70	797,635.53	925,570.29	33.186	-103.077
2,700.00	0.77	113.62	2,699.88	3.90	7.41	797,635.02	925,572.00	33.186	-103.077
2,800.00	0.35	153.51	2,799.87	3.34	7.91	797,634.46	925,572.50	33.186	-103.077
2,900.00	0.54	167.40	2,899.87	2.70	8.18	797,633.82	925,572.77	33.186	-103.077
3,000.00	0.65	168.89	2,999.86	1.58	8.35	797,632.70	925,572.94	33.186	-103.077
3,100.00	0.42	150.92	3,099.86	0.66	8.64	797,631.78	925,573.23	33.186	-103.077
3,200.00	0.35	146.88	3,199.86	0.15	9.00	797,631.27	925,573.59	33.186	-103.077
3,300.00	0.35	136.06	3,299.86	-0.34	9.36	797,630.78	925,573.95	33.186	-103.077
3,400.00	0.43	145.22	3,399.85	-0.84	9.80	797,630.28	925,574.39	33.186	-103.077
3,500.00	0.17	61.43	3,499.85	-1.13	10.15	797,629.98	925,574.74	33.186	-103.077
3,600.00	0.18	345.22	3,599.85	-0.89	10.24	797,630.23	925,574.83	33.186	-103.077
3,700.00	0.25	304.45	3,699.85	-0.61	10.00	797,630.51	925,574.59	33.186	-103.077
3,800.00	0.10	319.13	3,799.85	-0.47	9.76	797,630.64	925,574.35	33.186	-103.077
3,900.00	0.56	13.02	3,899.85	0.11	9.83	797,631.23	925,574.42	33.186	-103.077
4,000.00	0.72	18.84	3,999.84	1.19	10.14	797,632.31	925,574.73	33.186	-103.077
4,100.00	0.76	19.20	4,099.83	2.43	10.61	797,633.55	925,575.20	33.186	-103.077
4,200.00	0.78	18.08	4,199.82	3.67	10.93	797,634.79	925,575.52	33.186	-103.077
4,300.00	0.84	1.87	4,299.81	5.08	11.49	797,636.20	925,576.09	33.186	-103.077
4,400.00	0.89	301.20	4,399.80	6.39	10.64	797,637.51	925,575.23	33.186	-103.077
4,500.00	0.83	275.35	4,499.79	6.65	9.18	797,637.77	925,573.77	33.186	-103.077
4,545.44	0.79	279.39	4,545.22	6.73	8.55	797,637.85	925,573.14	33.186	-103.077
Start DLS 8.00 TFO -100.80 (Tied into Pilot) at 4545.44 MD									
4,600.00	4.29	189.00	4,599.73	4.78	7.85	797,635.90	925,572.45	33.186	-103.077
4,700.00	12.24	182.17	4,698.62	-9.53	6.87	797,621.59	925,571.46	33.186	-103.077
4,800.00	20.23	180.70	4,794.55	-37.46	6.25	797,593.66	925,570.84	33.186	-103.077
4,900.00	28.23	180.04	4,885.67	-78.46	6.03	797,552.66	925,570.62	33.186	-103.077
5,000.00	36.22	179.65	4,970.19	-131.74	6.19	797,499.38	925,570.78	33.186	-103.077
5,100.00	44.22	179.39	5,046.49	-196.26	6.74	797,434.86	925,571.33	33.186	-103.077

Planning Report - Geographic

Database:	EDM	Local Co-ordinate Reference:	Well Combo Fee 1H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Site:	Combo Fee 1H	North Reference:	Grid
Well:	Combo Fee 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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	
5,200.00	52.22	179.19	5,113.06	-270.77	7.67	797,360.35	925,572.26	33.186	-103.077	
5,297.25	60.00	179.04	5,167.24	-351.43	8.92	797,279.69	925,573.51	33.185	-103.077	
Start 250.00 hold at 5297.25 MD										
5,300.00	60.00	179.04	5,168.62	-353.81	8.96	797,277.31	925,573.55	33.185	-103.077	
5,400.00	60.00	179.04	5,218.62	-440.40	10.41	797,190.72	925,575.00	33.185	-103.077	
5,500.00	60.00	179.04	5,268.62	-526.99	11.86	797,104.13	925,576.45	33.185	-103.077	
5,547.25	60.00	179.04	5,292.24	-567.90	12.55	797,063.22	925,577.14	33.185	-103.077	
Start DLS 10.00 TFO -0.01 at 5547.25 MD										
5,600.00	65.27	179.04	5,316.48	-614.73	13.33	797,016.39	925,577.92	33.185	-103.077	
5,700.00	75.27	179.04	5,350.19	-708.73	14.91	796,922.39	925,579.50	33.184	-103.077	
5,800.00	85.27	179.04	5,367.06	-807.15	16.57	796,823.97	925,581.16	33.184	-103.077	
5,847.25	90.00	179.04	5,369.00	-854.34	17.36	796,776.78	925,581.95	33.184	-103.077	
Start 5002.62 hold at 5847.25 MD										
5,900.00	90.00	179.04	5,369.00	-907.08	18.25	796,724.04	925,582.84	33.184	-103.077	
6,000.00	90.00	179.04	5,369.00	-1,007.07	19.93	796,624.05	925,584.52	33.184	-103.077	
6,100.00	90.00	179.04	5,369.00	-1,107.05	21.61	796,524.07	925,586.20	33.183	-103.077	
6,200.00	90.00	179.04	5,369.00	-1,207.04	23.29	796,424.08	925,587.89	33.183	-103.077	
6,300.00	90.00	179.04	5,369.00	-1,307.03	24.98	796,324.09	925,589.57	33.183	-103.077	
6,400.00	90.00	179.04	5,369.00	-1,407.01	26.66	796,224.11	925,591.25	33.182	-103.077	
6,500.00	90.00	179.04	5,369.00	-1,507.00	28.34	796,124.12	925,592.93	33.182	-103.077	
6,600.00	90.00	179.04	5,369.00	-1,606.98	30.02	796,024.14	925,594.62	33.182	-103.077	
6,700.00	90.00	179.04	5,369.00	-1,706.97	31.71	795,924.15	925,596.30	33.182	-103.077	
6,800.00	90.00	179.04	5,369.00	-1,806.95	33.39	795,824.17	925,597.98	33.181	-103.077	
6,900.00	90.00	179.04	5,369.00	-1,906.94	35.07	795,724.18	925,599.66	33.181	-103.077	
7,000.00	90.00	179.04	5,369.00	-2,006.93	36.75	795,624.20	925,601.35	33.181	-103.077	
7,100.00	90.00	179.04	5,369.00	-2,106.91	38.44	795,524.21	925,603.03	33.181	-103.077	
7,200.00	90.00	179.04	5,369.00	-2,206.90	40.12	795,424.22	925,604.71	33.180	-103.077	
7,300.00	90.00	179.04	5,369.00	-2,306.88	41.80	795,324.24	925,606.39	33.180	-103.077	
7,400.00	90.00	179.04	5,369.00	-2,406.87	43.48	795,224.25	925,608.08	33.180	-103.077	
7,500.00	90.00	179.04	5,369.00	-2,506.86	45.17	795,124.27	925,609.76	33.179	-103.077	
7,600.00	90.00	179.04	5,369.00	-2,606.84	46.85	795,024.28	925,611.44	33.179	-103.077	
7,700.00	90.00	179.04	5,369.00	-2,706.83	48.53	794,924.30	925,613.12	33.179	-103.077	
7,800.00	90.00	179.04	5,369.00	-2,806.81	50.22	794,824.31	925,614.81	33.179	-103.077	
7,900.00	90.00	179.04	5,369.00	-2,906.80	51.90	794,724.32	925,616.49	33.178	-103.077	
8,000.00	90.00	179.04	5,369.00	-3,006.79	53.58	794,624.34	925,618.17	33.178	-103.077	
8,100.00	90.00	179.04	5,369.00	-3,106.77	55.26	794,524.35	925,619.85	33.178	-103.077	
8,200.00	90.00	179.04	5,369.00	-3,206.76	56.95	794,424.37	925,621.54	33.178	-103.077	
8,300.00	90.00	179.04	5,369.00	-3,306.74	58.63	794,324.38	925,623.22	33.177	-103.077	
8,400.00	90.00	179.04	5,369.00	-3,406.73	60.31	794,224.40	925,624.90	33.177	-103.077	
8,500.00	90.00	179.04	5,369.00	-3,506.71	61.99	794,124.41	925,626.58	33.177	-103.077	
8,600.00	90.00	179.04	5,369.00	-3,606.70	63.68	794,024.42	925,628.27	33.176	-103.077	
8,700.00	90.00	179.04	5,369.00	-3,706.69	65.36	793,924.44	925,629.95	33.176	-103.077	
8,800.00	90.00	179.04	5,369.00	-3,806.67	67.04	793,824.45	925,631.63	33.176	-103.077	
8,900.00	90.00	179.04	5,369.00	-3,906.66	68.72	793,724.47	925,633.31	33.176	-103.077	
9,000.00	90.00	179.04	5,369.00	-4,006.64	70.41	793,624.48	925,635.00	33.175	-103.077	
9,100.00	90.00	179.04	5,369.00	-4,106.63	72.09	793,524.50	925,636.68	33.175	-103.077	
9,200.00	90.00	179.04	5,369.00	-4,206.62	73.77	793,424.51	925,638.36	33.175	-103.077	
9,300.00	90.00	179.04	5,369.00	-4,306.60	75.45	793,324.53	925,640.04	33.174	-103.077	
9,400.00	90.00	179.04	5,369.00	-4,406.59	77.14	793,224.54	925,641.73	33.174	-103.077	
9,500.00	90.00	179.04	5,369.00	-4,506.57	78.82	793,124.55	925,643.41	33.174	-103.077	
9,600.00	90.00	179.04	5,369.00	-4,606.56	80.50	793,024.57	925,645.09	33.174	-103.077	
9,700.00	90.00	179.04	5,369.00	-4,706.54	82.18	792,924.58	925,646.77	33.173	-103.077	
9,800.00	90.00	179.04	5,369.00	-4,806.53	83.87	792,824.60	925,648.46	33.173	-103.077	
9,900.00	90.00	179.04	5,369.00	-4,906.52	85.55	792,724.61	925,650.14	33.173	-103.077	

Planning Report - Geographic

Database:	EDM	Local Co-ordinate Reference:	Well Combo Fee 1H
Company:	Steward Energy II, LLC	TVD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Project:	Lea County, NM (NAD 83) NM East Zone	MD Reference:	GL 3803' + RKB 17' @ 3820.00ft (Norton 6)
Site:	Combo Fee 1H	North Reference:	Grid
Well:	Combo Fee 1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral		
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
10,000.00	90.00	179.04	5,369.00	-5,006.50	87.23	792,624.63	925,651.82	33.173	-103.077
10,100.00	90.00	179.04	5,369.00	-5,106.49	88.91	792,524.64	925,653.50	33.172	-103.077
10,200.00	90.00	179.04	5,369.00	-5,206.47	90.60	792,424.65	925,655.19	33.172	-103.077
10,300.00	90.00	179.04	5,369.00	-5,306.46	92.28	792,324.67	925,656.87	33.172	-103.077
10,400.00	90.00	179.04	5,369.00	-5,406.45	93.96	792,224.68	925,658.55	33.171	-103.077
10,500.00	90.00	179.04	5,369.00	-5,506.43	95.64	792,124.70	925,660.23	33.171	-103.077
10,600.00	90.00	179.04	5,369.00	-5,606.42	97.33	792,024.71	925,661.92	33.171	-103.077
10,700.00	90.00	179.04	5,369.00	-5,706.40	99.01	791,924.73	925,663.60	33.171	-103.077
10,800.00	90.00	179.04	5,369.00	-5,806.39	100.69	791,824.74	925,665.28	33.170	-103.077
10,849.87	90.00	179.04	5,369.00	-5,856.25	101.53	791,774.88	925,666.12	33.170	-103.077
TD at 10849.87 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 Combo Fee 1H - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	797,631.12	925,564.59	33.186	-103.077
FTP Combo Fee 1H - plan misses target center by 2.35ft at 5759.52ft MD (5362.30 TVD, -766.96 N, 15.89 E) - Point	0.00	0.00	5,362.29	-766.91	18.24	796,864.21	925,582.83	33.184	-103.077
PBHL Combo Fee 1H - plan hits target center - Point	0.00	0.00	5,369.00	-5,856.25	101.53	791,774.88	925,666.12	33.170	-103.077

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
4,545.44	4,545.22	6.73	8.55	Start DLS 8.00 TFO -100.80 (Tied into Pilot) at 4545.44 MD	
5,297.25	5,167.24	-351.43	8.92	Start 250.00 hold at 5297.25 MD	
5,547.25	5,292.24	-567.90	12.55	Start DLS 10.00 TFO -0.01 at 5547.25 MD	
5,847.25	5,369.00	-854.34	17.36	Start 5002.62 hold at 5847.25 MD	
10,849.87	5,369.00	-5,856.25	101.53	TD at 10849.87 MD	