

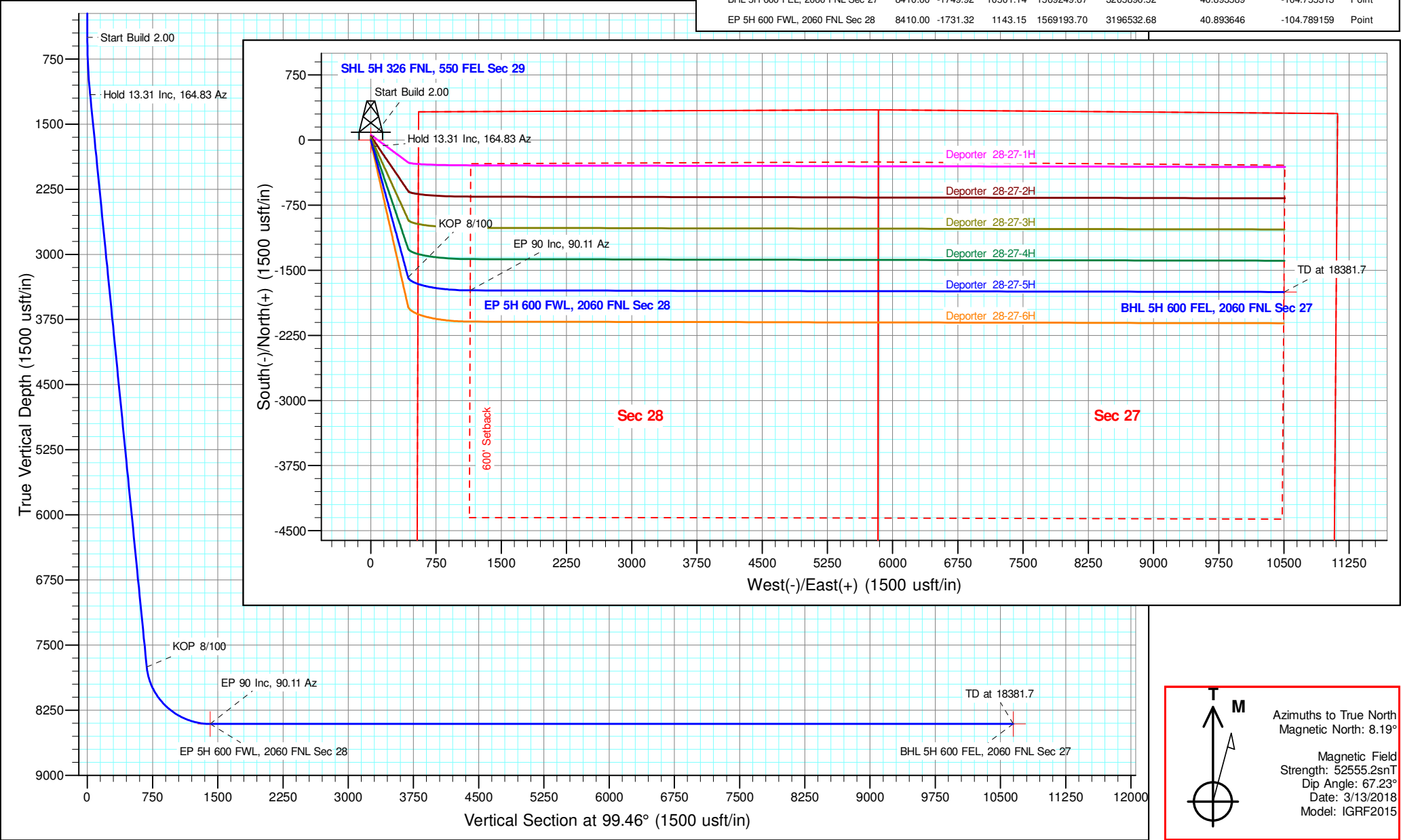
Edge Energy, LLC

Well Name: Deporter 28-27-5H	Project Name: Sec. 29-T11N-R66W	Pad Name: Deporter 29-A
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ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	Start Build 2.00	
1165.59	13.31	164.83	1159.62	-74.29	20.15	32.09	76.97	Hold 13.31 Inc, 164.83 Az	
7942.20	13.31	164.83	7754.15	-1580.21	428.57	682.49	1637.29	KOP 8/100	
9023.69	90.00	90.11	8410.00	-1731.32	1143.15	1412.18	2386.85	EP 90 Inc, 90.11 Az	
18381.70	90.00	90.11	8410.00	-1749.92	10501.14	10645.94	11744.85	TD at 18381.7	

Geodetic Datum:				Elevation:	
North American Datum 1983				Ground Elevation: 5645.00	
US State Plane 1983, Colorado Northern Zone				KB Elevation: WELL @ 5660.00usft (Original Well Elev)	

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
SHL 5H 326 FNL, 550 FEL Sec 29	0.00	0.00	0.00	1570915.85	3195375.77	40.898398	-104.793294	Point	
BHL 5H 600 FEL, 2060 FNL Sec 27	8410.00	-1749.92	10501.14	1569249.67	3205890.52	40.893589	-104.755313	Point	
EP 5H 600 FWL, 2060 FNL Sec 28	8410.00	-1731.32	1143.15	1569193.70	3196532.68	40.893646	-104.789159	Point	



Compass rose showing True North (T) and Magnetic North (M).

Azimuths to True North
Magnetic North: 8.19°

Magnetic Field
Strength: 52555.2snT
Dip Angle: 67.23°
Date: 3/13/2018
Model: IGRF2015

Edge Energy, LLC

Sec. 29-T11N-R66W

Deporter 29-A

Deporter 28-27-5H

Wellbore #1

Plan: Design #1 13Mar18 kjs

Standard Planning Report - Geographic

13 March, 2018

Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Deporter 28-27-5H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5660.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W	MD Reference:	WELL @ 5660.00usft (Original Well Elev)
Site:	Deporter 29-A	North Reference:	True
Well:	Deporter 28-27-5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 13Mar18 kjs		

Project	Sec. 29-T11N-R66W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Deporter 29-A			
Site Position:		Northing:	1,570,975.88 usft	Latitude:	40.898563
From:	Map	Easting:	3,195,375.39 usft	Longitude:	-104.793294
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.46 °

Well	Deporter 28-27-5H					
Well Position	+N/-S	0.00 usft	Northing:	1,570,915.85 usft	Latitude:	40.898398
	+E/-W	0.00 usft	Easting:	3,195,375.77 usft	Longitude:	-104.793294
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,645.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/13/2018	8.19	67.23	52,555.20622664

Design	Design #1 13Mar18 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	99.46

Plan Survey Tool Program	Date	3/13/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,381.70 Design #1 13Mar18 kjs (Wellbore)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,165.59	13.31	164.83	1,159.62	-74.29	20.15	2.00	2.00	0.00	164.83	
7,942.20	13.31	164.83	7,754.15	-1,580.21	428.57	0.00	0.00	0.00	0.00	
9,023.69	90.00	90.11	8,410.00	-1,731.32	1,143.15	8.00	7.09	-6.91	-75.10	EP 5H 600 FWL, 206
18,381.70	90.00	90.11	8,410.00	-1,749.92	10,501.14	0.00	0.00	0.00	0.00	BHL 5H 600 FEL, 206

Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Deporter 28-27-5H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5660.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W	MD Reference:	WELL @ 5660.00usft (Original Well Elev)
Site:	Deporter 29-A	North Reference:	True
Well:	Deporter 28-27-5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 13Mar18 kjs		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	1,570,915.85	3,195,375.77	40.898398	-104.793294
200.00	0.00	0.00	200.00	0.00	0.00	1,570,915.85	3,195,375.77	40.898398	-104.793294
400.00	0.00	0.00	400.00	0.00	0.00	1,570,915.85	3,195,375.77	40.898398	-104.793294
500.00	0.00	0.00	500.00	0.00	0.00	1,570,915.85	3,195,375.77	40.898398	-104.793294
Start Build 2.00									
600.00	2.00	164.83	599.98	-1.68	0.46	1,570,914.16	3,195,376.24	40.898393	-104.793293
800.00	6.00	164.83	799.45	-15.15	4.11	1,570,900.73	3,195,380.00	40.898356	-104.793279
1,000.00	10.00	164.83	997.47	-42.01	11.39	1,570,873.93	3,195,387.50	40.898282	-104.793253
1,165.59	13.31	164.83	1,159.62	-74.29	20.15	1,570,841.72	3,195,396.51	40.898194	-104.793221
Hold 13.31 Inc, 164.83 Az									
1,200.00	13.31	164.83	1,193.10	-81.94	22.22	1,570,834.09	3,195,398.65	40.898173	-104.793214
1,400.00	13.31	164.83	1,387.73	-126.38	34.28	1,570,789.74	3,195,411.05	40.898051	-104.793170
1,600.00	13.31	164.83	1,582.36	-170.82	46.33	1,570,745.40	3,195,423.46	40.897929	-104.793127
1,800.00	13.31	164.83	1,776.98	-215.27	58.38	1,570,701.05	3,195,435.87	40.897807	-104.793083
2,000.00	13.31	164.83	1,971.61	-259.71	70.44	1,570,656.70	3,195,448.28	40.897685	-104.793039
2,200.00	13.31	164.83	2,166.23	-304.16	82.49	1,570,612.35	3,195,460.68	40.897563	-104.792996
2,400.00	13.31	164.83	2,360.86	-348.60	94.55	1,570,568.01	3,195,473.09	40.897441	-104.792952
2,600.00	13.31	164.83	2,555.49	-393.05	106.60	1,570,523.66	3,195,485.50	40.897319	-104.792909
2,800.00	13.31	164.83	2,750.11	-437.49	118.65	1,570,479.31	3,195,497.91	40.897197	-104.792865
3,000.00	13.31	164.83	2,944.74	-481.94	130.71	1,570,434.97	3,195,510.32	40.897075	-104.792821
3,200.00	13.31	164.83	3,139.37	-526.38	142.76	1,570,390.62	3,195,522.72	40.896953	-104.792778
3,400.00	13.31	164.83	3,333.99	-570.83	154.82	1,570,346.27	3,195,535.13	40.896831	-104.792734
3,600.00	13.31	164.83	3,528.62	-615.27	166.87	1,570,301.92	3,195,547.54	40.896709	-104.792691
3,800.00	13.31	164.83	3,723.25	-659.71	178.92	1,570,257.58	3,195,559.95	40.896587	-104.792647
4,000.00	13.31	164.83	3,917.87	-704.16	190.98	1,570,213.23	3,195,572.35	40.896465	-104.792603
4,200.00	13.31	164.83	4,112.50	-748.60	203.03	1,570,168.88	3,195,584.76	40.896343	-104.792560
4,400.00	13.31	164.83	4,307.12	-793.05	215.08	1,570,124.54	3,195,597.17	40.896221	-104.792516
4,600.00	13.31	164.83	4,501.75	-837.49	227.14	1,570,080.19	3,195,609.58	40.896099	-104.792473
4,800.00	13.31	164.83	4,696.38	-881.94	239.19	1,570,035.84	3,195,621.98	40.895977	-104.792429
5,000.00	13.31	164.83	4,891.00	-926.38	251.25	1,569,991.49	3,195,634.39	40.895855	-104.792386
5,200.00	13.31	164.83	5,085.63	-970.83	263.30	1,569,947.15	3,195,646.80	40.895733	-104.792342
5,400.00	13.31	164.83	5,280.26	-1,015.27	275.35	1,569,902.80	3,195,659.21	40.895611	-104.792298
5,600.00	13.31	164.83	5,474.88	-1,059.72	287.41	1,569,858.45	3,195,671.62	40.895489	-104.792255
5,800.00	13.31	164.83	5,669.51	-1,104.16	299.46	1,569,814.11	3,195,684.02	40.895367	-104.792211
6,000.00	13.31	164.83	5,864.13	-1,148.61	311.52	1,569,769.76	3,195,696.43	40.895245	-104.792168
6,200.00	13.31	164.83	6,058.76	-1,193.05	323.57	1,569,725.41	3,195,708.84	40.895123	-104.792124
6,400.00	13.31	164.83	6,253.39	-1,237.49	335.62	1,569,681.07	3,195,721.25	40.895001	-104.792080
6,600.00	13.31	164.83	6,448.01	-1,281.94	347.68	1,569,636.72	3,195,733.65	40.894879	-104.792037
6,800.00	13.31	164.83	6,642.64	-1,326.38	359.73	1,569,592.37	3,195,746.06	40.894757	-104.791993
7,000.00	13.31	164.83	6,837.27	-1,370.83	371.79	1,569,548.02	3,195,758.47	40.894635	-104.791950
7,200.00	13.31	164.83	7,031.89	-1,415.27	383.84	1,569,503.68	3,195,770.88	40.894513	-104.791906
7,400.00	13.31	164.83	7,226.52	-1,459.72	395.89	1,569,459.33	3,195,783.29	40.894391	-104.791862
7,600.00	13.31	164.83	7,421.14	-1,504.16	407.95	1,569,414.98	3,195,795.69	40.894269	-104.791819
7,800.00	13.31	164.83	7,615.77	-1,548.61	420.00	1,569,370.64	3,195,808.10	40.894147	-104.791775
7,942.20	13.31	164.83	7,754.15	-1,580.21	428.57	1,569,339.10	3,195,816.92	40.894061	-104.791744
KOP 8/100									
8,000.00	15.16	147.50	7,810.20	-1,593.01	434.38	1,569,326.35	3,195,822.83	40.894026	-104.791723
8,200.00	27.14	116.56	7,996.92	-1,635.74	489.59	1,569,284.06	3,195,878.38	40.893908	-104.791523
8,400.00	41.78	104.91	8,161.56	-1,673.52	595.47	1,569,247.12	3,195,984.56	40.893805	-104.791141
8,600.00	57.06	98.62	8,291.34	-1,703.44	743.80	1,569,218.39	3,196,133.12	40.893722	-104.790604
8,800.00	72.57	94.22	8,376.22	-1,723.17	923.09	1,569,200.09	3,196,312.57	40.893668	-104.789956
9,000.00	88.15	90.54	8,409.62	-1,731.18	1,119.46	1,569,193.64	3,196,508.99	40.893646	-104.789245
9,023.69	90.00	90.11	8,410.00	-1,731.32	1,143.15	1,569,193.70	3,196,532.68	40.893646	-104.789160
EP 90 Inc, 90.11 Az									

Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Deporter 28-27-5H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5660.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W	MD Reference:	WELL @ 5660.00usft (Original Well Elev)
Site:	Deporter 29-A	North Reference:	True
Well:	Deporter 28-27-5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 13Mar18 kjs		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,200.00	90.00	90.11	8,410.00	-1,731.67	1,319.46	1,569,194.75	3,196,708.99	40.893645	-104.788522	
9,400.00	90.00	90.11	8,410.00	-1,732.06	1,519.46	1,569,195.95	3,196,908.98	40.893644	-104.787799	
9,600.00	90.00	90.11	8,410.00	-1,732.46	1,719.46	1,569,197.14	3,197,108.98	40.893643	-104.787075	
9,800.00	90.00	90.11	8,410.00	-1,732.86	1,919.46	1,569,198.34	3,197,308.98	40.893642	-104.786352	
10,000.00	90.00	90.11	8,410.00	-1,733.26	2,119.46	1,569,199.53	3,197,508.97	40.893640	-104.785628	
10,200.00	90.00	90.11	8,410.00	-1,733.65	2,319.45	1,569,200.73	3,197,708.97	40.893639	-104.784905	
10,400.00	90.00	90.11	8,410.00	-1,734.05	2,519.45	1,569,201.93	3,197,908.97	40.893638	-104.784182	
10,600.00	90.00	90.11	8,410.00	-1,734.45	2,719.45	1,569,203.12	3,198,108.96	40.893637	-104.783458	
10,800.00	90.00	90.11	8,410.00	-1,734.85	2,919.45	1,569,204.32	3,198,308.96	40.893636	-104.782735	
11,000.00	90.00	90.11	8,410.00	-1,735.25	3,119.45	1,569,205.52	3,198,508.95	40.893635	-104.782012	
11,200.00	90.00	90.11	8,410.00	-1,735.64	3,319.45	1,569,206.71	3,198,708.95	40.893633	-104.781288	
11,400.00	90.00	90.11	8,410.00	-1,736.04	3,519.45	1,569,207.91	3,198,908.95	40.893632	-104.780565	
11,600.00	90.00	90.11	8,410.00	-1,736.44	3,719.45	1,569,209.10	3,199,108.94	40.893631	-104.779841	
11,800.00	90.00	90.11	8,410.00	-1,736.84	3,919.45	1,569,210.30	3,199,308.94	40.893630	-104.779118	
12,000.00	90.00	90.11	8,410.00	-1,737.23	4,119.45	1,569,211.50	3,199,508.94	40.893629	-104.778395	
12,200.00	90.00	90.11	8,410.00	-1,737.63	4,319.45	1,569,212.69	3,199,708.93	40.893628	-104.777671	
12,400.00	90.00	90.11	8,410.00	-1,738.03	4,519.45	1,569,213.89	3,199,908.93	40.893626	-104.776948	
12,600.00	90.00	90.11	8,410.00	-1,738.43	4,719.45	1,569,215.08	3,200,108.93	40.893625	-104.776225	
12,800.00	90.00	90.11	8,410.00	-1,738.83	4,919.45	1,569,216.28	3,200,308.92	40.893624	-104.775501	
13,000.00	90.00	90.11	8,410.00	-1,739.22	5,119.45	1,569,217.48	3,200,508.92	40.893623	-104.774778	
13,200.00	90.00	90.11	8,410.00	-1,739.62	5,319.45	1,569,218.67	3,200,708.92	40.893622	-104.774055	
13,400.00	90.00	90.11	8,410.00	-1,740.02	5,519.45	1,569,219.87	3,200,908.91	40.893620	-104.773331	
13,600.00	90.00	90.11	8,410.00	-1,740.42	5,719.45	1,569,221.07	3,201,108.91	40.893619	-104.772608	
13,800.00	90.00	90.11	8,410.00	-1,740.81	5,919.45	1,569,222.26	3,201,308.90	40.893618	-104.771884	
14,000.00	90.00	90.11	8,410.00	-1,741.21	6,119.45	1,569,223.46	3,201,508.90	40.893617	-104.771161	
14,200.00	90.00	90.11	8,410.00	-1,741.61	6,319.45	1,569,224.65	3,201,708.90	40.893615	-104.770438	
14,400.00	90.00	90.11	8,410.00	-1,742.01	6,519.45	1,569,225.85	3,201,908.89	40.893614	-104.769714	
14,600.00	90.00	90.11	8,410.00	-1,742.40	6,719.45	1,569,227.05	3,202,108.89	40.893613	-104.768991	
14,800.00	90.00	90.11	8,410.00	-1,742.80	6,919.45	1,569,228.24	3,202,308.89	40.893612	-104.768268	
15,000.00	90.00	90.11	8,410.00	-1,743.20	7,119.45	1,569,229.44	3,202,508.88	40.893611	-104.767544	
15,200.00	90.00	90.11	8,410.00	-1,743.60	7,319.45	1,569,230.64	3,202,708.88	40.893609	-104.766821	
15,400.00	90.00	90.11	8,410.00	-1,744.00	7,519.44	1,569,231.83	3,202,908.88	40.893608	-104.766097	
15,600.00	90.00	90.11	8,410.00	-1,744.39	7,719.44	1,569,233.03	3,203,108.87	40.893607	-104.765374	
15,800.00	90.00	90.11	8,410.00	-1,744.79	7,919.44	1,569,234.22	3,203,308.87	40.893605	-104.764651	
16,000.00	90.00	90.11	8,410.00	-1,745.19	8,119.44	1,569,235.42	3,203,508.87	40.893604	-104.763927	
16,200.00	90.00	90.11	8,410.00	-1,745.59	8,319.44	1,569,236.62	3,203,708.86	40.893603	-104.763204	
16,400.00	90.00	90.11	8,410.00	-1,745.98	8,519.44	1,569,237.81	3,203,908.86	40.893602	-104.762481	
16,600.00	90.00	90.11	8,410.00	-1,746.38	8,719.44	1,569,239.01	3,204,108.85	40.893600	-104.761757	
16,800.00	90.00	90.11	8,410.00	-1,746.78	8,919.44	1,569,240.20	3,204,308.85	40.893599	-104.761034	
17,000.00	90.00	90.11	8,410.00	-1,747.18	9,119.44	1,569,241.40	3,204,508.85	40.893598	-104.760310	
17,200.00	90.00	90.11	8,410.00	-1,747.57	9,319.44	1,569,242.60	3,204,708.84	40.893596	-104.759587	
17,400.00	90.00	90.11	8,410.00	-1,747.97	9,519.44	1,569,243.79	3,204,908.84	40.893595	-104.758864	
17,600.00	90.00	90.11	8,410.00	-1,748.37	9,719.44	1,569,244.99	3,205,108.84	40.893594	-104.758140	
17,800.00	90.00	90.11	8,410.00	-1,748.77	9,919.44	1,569,246.19	3,205,308.83	40.893593	-104.757417	
18,000.00	90.00	90.11	8,410.00	-1,749.17	10,119.44	1,569,247.38	3,205,508.83	40.893591	-104.756694	
18,200.00	90.00	90.11	8,410.00	-1,749.56	10,319.44	1,569,248.58	3,205,708.83	40.893590	-104.755970	
18,381.70	90.00	90.11	8,410.00	-1,749.92	10,501.14	1,569,249.67	3,205,890.52	40.893589	-104.755313	
TD at 18381.7										

Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Deporter 28-27-5H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5660.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W	MD Reference:	WELL @ 5660.00usft (Original Well Elev)
Site:	Deporter 29-A	North Reference:	True
Well:	Deporter 28-27-5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 13Mar18 kjs		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
SHL 5H 326 FNL, 550 F - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	1,570,915.85	3,195,375.77	40.898398	-104.793294
EP 5H 600 FWL, 2060 F - plan hits target center - Point	0.00	0.00	8,410.00	-1,731.32	1,143.15	1,569,193.70	3,196,532.68	40.893646	-104.789160
BHL 5H 600 FEL, 2060 I - plan hits target center - Point	0.00	0.00	8,410.00	-1,749.92	10,501.14	1,569,249.67	3,205,890.52	40.893589	-104.755313

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
500.00	500.00	0.00	0.00	Start Build 2.00
1,165.59	1,159.62	-74.29	20.15	Hold 13.31 Inc, 164.83 Az
7,942.20	7,754.15	-1,580.21	428.57	KOP 8/100
9,023.69	8,410.00	-1,731.32	1,143.15	EP 90 Inc, 90.11 Az
18,381.70	8,410.00	-1,749.92	10,501.14	TD at 18381.7