

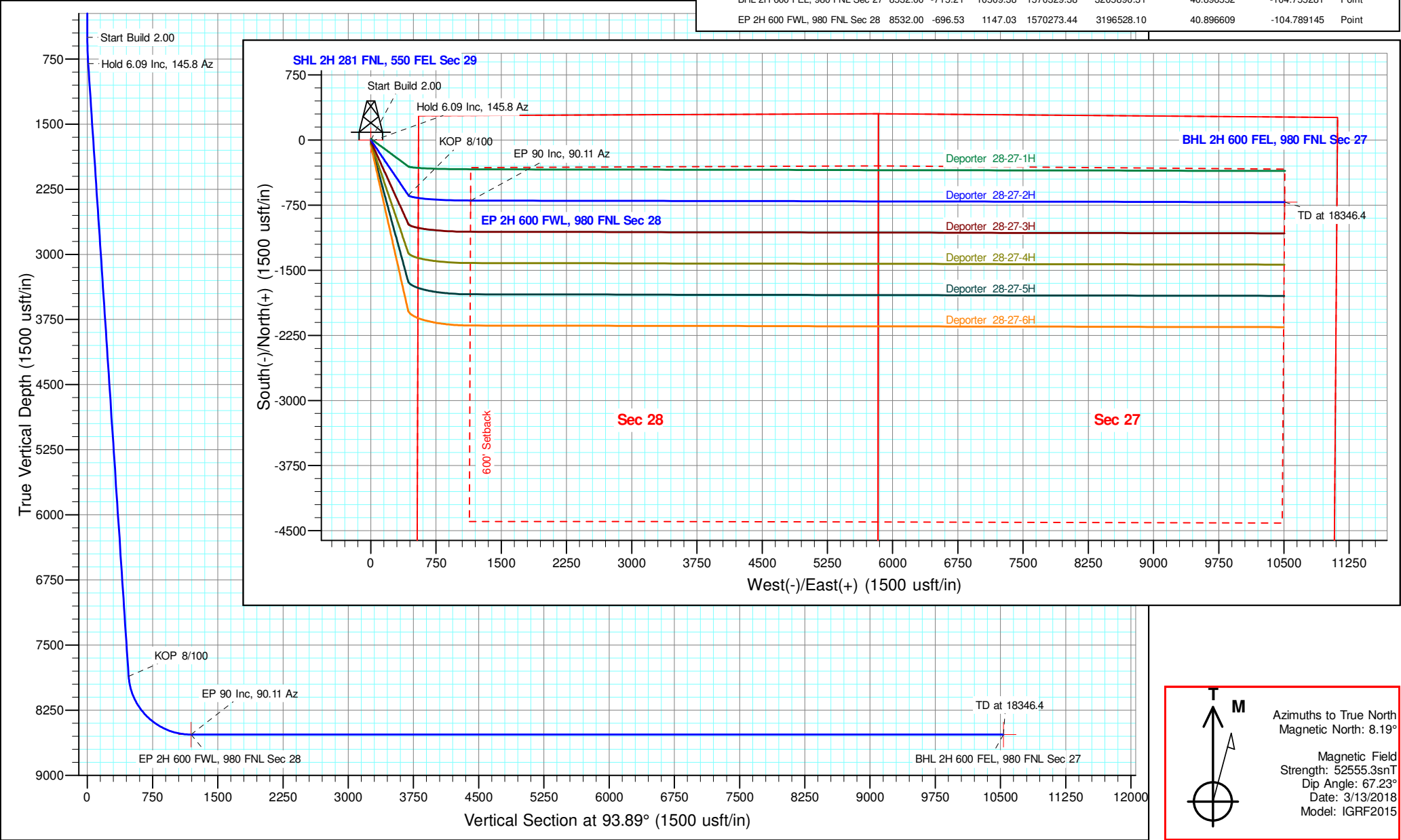
Edge Energy, LLC

Well Name: Deporter 28-27-2H	Project Name: Sec. 29-T11N-R66W	Pad Name: Deporter 29-A
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ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	Start Build 2.00	
804.44	6.09	145.80	803.87	-13.37	9.08	9.97	16.16	Hold 6.09 Inc, 145.8 Az	
7901.84	6.09	145.80	7861.23	-636.01	432.23	474.41	768.98	KOP 8/100	
8983.99	90.00	90.11	8532.00	-696.53	1147.03	1191.67	1490.44	EP 90 Inc, 90.11 Az	
18346.36	90.00	90.11	8532.00	-715.21	10509.38	10533.69	10852.81	TD at 18346.4	

Geodetic Datum:					Elevation:				
North American Datum 1983					Ground Elevation: 5647.00				
US State Plane 1983, Colorado Northern Zone					KB Elevation: WELL @ 5662.00usft (Original Well Elev)				

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
SHL 2H 281 FNL, 550 FEL Sec 29	0.00	0.00	0.00	1570960.81	3195375.56	40.898521	-104.793293	Point	
BHL 2H 600 FEL, 980 FNL Sec 27	8532.00	-715.21	10509.38	1570329.38	3205890.31	40.896552	-104.755281	Point	
EP 2H 600 FWL, 980 FNL Sec 28	8532.00	-696.53	1147.03	1570273.44	3196528.10	40.896609	-104.789145	Point	



Edge Energy, LLC

Sec. 29-T11N-R66W

Deporter 29-A

Deporter 28-27-2H

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 Reporter 28-27-2H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5662.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W	MD Reference:	WELL @ 5662.00usft (Original Well Elev)
Site:	Deporter 29-A	North Reference:	True
Well:	Deporter 28-27-2H	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 28-27-2H				
Well Position	+N/-S	0.00 usft	Northing:	1,570,960.81 usft	Latitude:	40.898521
	+E/-W	0.00 usft	Easting:	3,195,375.56 usft	Longitude:	-104.793294
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,647.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/13/2018	8.19	67.23	52,555.25318058

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	93.89

Plan Survey Tool Program	Date	3/13/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,346.36 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	
804.44	6.09	145.80	803.87	-13.37	9.08	2.00	2.00	0.00	145.80	
7,901.84	6.09	145.80	7,861.23	-636.01	432.23	0.00	0.00	0.00	0.00	
8,983.99	90.00	90.11	8,532.00	-696.53	1,147.03	8.00	7.75	-5.15	-55.84	EP 2H 600 FWL, 980
18,346.36	90.00	90.11	8,532.00	-715.21	10,509.38	0.00	0.00	0.00	0.00	BHL 2H 600 FEL, 980

Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Deporter 28-27-2H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5662.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W	MD Reference:	WELL @ 5662.00usft (Original Well Elev)
Site:	Deporter 29-A	North Reference:	True
Well:	Deporter 28-27-2H	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	1,570,960.81	3,195,375.56	40.898521	-104.793294
200.00	0.00	0.00	200.00	0.00	0.00	1,570,960.81	3,195,375.56	40.898521	-104.793294
400.00	0.00	0.00	400.00	0.00	0.00	1,570,960.81	3,195,375.56	40.898521	-104.793294
500.00	0.00	0.00	500.00	0.00	0.00	1,570,960.81	3,195,375.56	40.898521	-104.793294
Start Build 2.00									
600.00	2.00	145.80	599.98	-1.44	0.98	1,570,959.37	3,195,376.55	40.898517	-104.793290
800.00	6.00	145.80	799.45	-12.98	8.82	1,570,947.90	3,195,384.49	40.898486	-104.793262
804.44	6.09	145.80	803.87	-13.37	9.08	1,570,947.51	3,195,384.75	40.898484	-104.793261
Hold 6.09 Inc, 145.8 Az									
1,000.00	6.09	145.80	998.32	-30.52	20.74	1,570,930.45	3,195,396.55	40.898437	-104.793219
1,200.00	6.09	145.80	1,197.20	-48.07	32.67	1,570,913.00	3,195,408.61	40.898389	-104.793176
1,400.00	6.09	145.80	1,396.07	-65.61	44.59	1,570,895.55	3,195,420.67	40.898341	-104.793132
1,600.00	6.09	145.80	1,594.94	-83.16	56.51	1,570,878.10	3,195,432.74	40.898293	-104.793089
1,800.00	6.09	145.80	1,793.81	-100.71	68.44	1,570,860.65	3,195,444.80	40.898245	-104.793046
2,000.00	6.09	145.80	1,992.68	-118.25	80.36	1,570,843.20	3,195,456.86	40.898197	-104.793003
2,200.00	6.09	145.80	2,191.55	-135.80	92.29	1,570,825.75	3,195,468.93	40.898148	-104.792960
2,400.00	6.09	145.80	2,390.43	-153.34	104.21	1,570,808.30	3,195,480.99	40.898100	-104.792917
2,600.00	6.09	145.80	2,589.30	-170.89	116.13	1,570,790.85	3,195,493.05	40.898052	-104.792874
2,800.00	6.09	145.80	2,788.17	-188.43	128.06	1,570,773.40	3,195,505.12	40.898004	-104.792831
3,000.00	6.09	145.80	2,987.04	-205.98	139.98	1,570,755.95	3,195,517.18	40.897956	-104.792787
3,200.00	6.09	145.80	3,185.91	-223.52	151.91	1,570,738.50	3,195,529.24	40.897908	-104.792744
3,400.00	6.09	145.80	3,384.79	-241.07	163.83	1,570,721.05	3,195,541.31	40.897860	-104.792701
3,600.00	6.09	145.80	3,583.66	-258.62	175.75	1,570,703.60	3,195,553.37	40.897811	-104.792658
3,800.00	6.09	145.80	3,782.53	-276.16	187.68	1,570,686.15	3,195,565.43	40.897763	-104.792615
4,000.00	6.09	145.80	3,981.40	-293.71	199.60	1,570,668.70	3,195,577.50	40.897715	-104.792572
4,200.00	6.09	145.80	4,180.27	-311.25	211.53	1,570,651.25	3,195,589.56	40.897667	-104.792529
4,400.00	6.09	145.80	4,379.14	-328.80	223.45	1,570,633.80	3,195,601.62	40.897619	-104.792485
4,600.00	6.09	145.80	4,578.02	-346.34	235.37	1,570,616.35	3,195,613.69	40.897571	-104.792442
4,800.00	6.09	145.80	4,776.89	-363.89	247.30	1,570,598.90	3,195,625.75	40.897522	-104.792399
5,000.00	6.09	145.80	4,975.76	-381.44	259.22	1,570,581.45	3,195,637.82	40.897474	-104.792356
5,200.00	6.09	145.80	5,174.63	-398.98	271.15	1,570,564.00	3,195,649.88	40.897426	-104.792313
5,400.00	6.09	145.80	5,373.50	-416.53	283.07	1,570,546.55	3,195,661.94	40.897378	-104.792270
5,600.00	6.09	145.80	5,572.37	-434.07	294.99	1,570,529.10	3,195,674.01	40.897330	-104.792227
5,800.00	6.09	145.80	5,771.25	-451.62	306.92	1,570,511.65	3,195,686.07	40.897282	-104.792184
6,000.00	6.09	145.80	5,970.12	-469.16	318.84	1,570,494.20	3,195,698.13	40.897233	-104.792140
6,200.00	6.09	145.80	6,168.99	-486.71	330.77	1,570,476.75	3,195,710.20	40.897185	-104.792097
6,400.00	6.09	145.80	6,367.86	-504.25	342.69	1,570,459.30	3,195,722.26	40.897137	-104.792054
6,600.00	6.09	145.80	6,566.73	-521.80	354.61	1,570,441.85	3,195,734.32	40.897089	-104.792011
6,800.00	6.09	145.80	6,765.60	-539.35	366.54	1,570,424.40	3,195,746.39	40.897041	-104.791968
7,000.00	6.09	145.80	6,964.48	-556.89	378.46	1,570,406.95	3,195,758.45	40.896993	-104.791925
7,200.00	6.09	145.80	7,163.35	-574.44	390.39	1,570,389.50	3,195,770.51	40.896945	-104.791882
7,400.00	6.09	145.80	7,362.22	-591.98	402.31	1,570,372.05	3,195,782.58	40.896896	-104.791839
7,600.00	6.09	145.80	7,561.09	-609.53	414.23	1,570,354.60	3,195,794.64	40.896848	-104.791795
7,800.00	6.09	145.80	7,759.96	-627.07	426.16	1,570,337.15	3,195,806.70	40.896800	-104.791752
7,901.84	6.09	145.80	7,861.23	-636.01	432.23	1,570,328.26	3,195,812.85	40.896776	-104.791730
KOP 8/100									
8,000.00	12.34	113.86	7,958.13	-644.57	444.77	1,570,319.80	3,195,825.45	40.896752	-104.791685
8,200.00	27.71	99.77	8,145.57	-661.22	510.56	1,570,303.68	3,195,891.38	40.896706	-104.791447
8,400.00	43.52	95.44	8,307.68	-675.73	625.67	1,570,290.08	3,196,006.60	40.896667	-104.791031
8,600.00	59.41	93.10	8,431.89	-686.98	781.19	1,570,280.07	3,196,162.20	40.896636	-104.790468
8,800.00	75.34	91.44	8,508.59	-694.11	965.06	1,570,274.41	3,196,346.12	40.896616	-104.789803
8,983.99	90.00	90.11	8,532.00	-696.53	1,147.03	1,570,273.44	3,196,528.10	40.896609	-104.789145
EP 90 Inc, 90.11 Az									
9,000.00	90.00	90.11	8,532.00	-696.57	1,163.04	1,570,273.53	3,196,544.11	40.896609	-104.789087

Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Deporter 28-27-2H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5662.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W	MD Reference:	WELL @ 5662.00usft (Original Well Elev)
Site:	Deporter 29-A	North Reference:	True
Well:	Deporter 28-27-2H	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	8,532.00	-696.96	1,363.04	1,570,274.73	3,196,744.11	40.896608	-104.788364	
9,400.00	90.00	90.11	8,532.00	-697.36	1,563.04	1,570,275.92	3,196,944.11	40.896607	-104.787640	
9,600.00	90.00	90.11	8,532.00	-697.76	1,763.04	1,570,277.12	3,197,144.10	40.896606	-104.786917	
9,800.00	90.00	90.11	8,532.00	-698.16	1,963.04	1,570,278.31	3,197,344.10	40.896605	-104.786193	
10,000.00	90.00	90.11	8,532.00	-698.56	2,163.04	1,570,279.51	3,197,544.10	40.896604	-104.785470	
10,200.00	90.00	90.11	8,532.00	-698.96	2,363.04	1,570,280.70	3,197,744.09	40.896602	-104.784747	
10,400.00	90.00	90.11	8,532.00	-699.36	2,563.04	1,570,281.90	3,197,944.09	40.896601	-104.784023	
10,600.00	90.00	90.11	8,532.00	-699.76	2,763.04	1,570,283.09	3,198,144.09	40.896600	-104.783300	
10,800.00	90.00	90.11	8,532.00	-700.16	2,963.04	1,570,284.29	3,198,344.08	40.896599	-104.782576	
11,000.00	90.00	90.11	8,532.00	-700.55	3,163.03	1,570,285.48	3,198,544.08	40.896598	-104.781853	
11,200.00	90.00	90.11	8,532.00	-700.95	3,363.03	1,570,286.68	3,198,744.08	40.896597	-104.781130	
11,400.00	90.00	90.11	8,532.00	-701.35	3,563.03	1,570,287.87	3,198,944.07	40.896596	-104.780406	
11,600.00	90.00	90.11	8,532.00	-701.75	3,763.03	1,570,289.07	3,199,144.07	40.896594	-104.779683	
11,800.00	90.00	90.11	8,532.00	-702.15	3,963.03	1,570,290.26	3,199,344.06	40.896593	-104.778959	
12,000.00	90.00	90.11	8,532.00	-702.55	4,163.03	1,570,291.46	3,199,544.06	40.896592	-104.778236	
12,200.00	90.00	90.11	8,532.00	-702.95	4,363.03	1,570,292.65	3,199,744.06	40.896591	-104.777513	
12,400.00	90.00	90.11	8,532.00	-703.35	4,563.03	1,570,293.85	3,199,944.05	40.896590	-104.776789	
12,600.00	90.00	90.11	8,532.00	-703.75	4,763.03	1,570,295.04	3,200,144.05	40.896588	-104.776066	
12,800.00	90.00	90.11	8,532.00	-704.14	4,963.03	1,570,296.24	3,200,344.05	40.896587	-104.775342	
13,000.00	90.00	90.11	8,532.00	-704.54	5,163.03	1,570,297.43	3,200,544.04	40.896586	-104.774619	
13,200.00	90.00	90.11	8,532.00	-704.94	5,363.03	1,570,298.63	3,200,744.04	40.896585	-104.773896	
13,400.00	90.00	90.11	8,532.00	-705.34	5,563.03	1,570,299.82	3,200,944.04	40.896584	-104.773172	
13,600.00	90.00	90.11	8,532.00	-705.74	5,763.03	1,570,301.02	3,201,144.03	40.896582	-104.772449	
13,800.00	90.00	90.11	8,532.00	-706.14	5,963.03	1,570,302.21	3,201,344.03	40.896581	-104.771725	
14,000.00	90.00	90.11	8,532.00	-706.54	6,163.03	1,570,303.41	3,201,544.03	40.896580	-104.771002	
14,200.00	90.00	90.11	8,532.00	-706.94	6,363.03	1,570,304.60	3,201,744.02	40.896579	-104.770278	
14,400.00	90.00	90.11	8,532.00	-707.34	6,563.03	1,570,305.80	3,201,944.02	40.896577	-104.769555	
14,600.00	90.00	90.11	8,532.00	-707.74	6,763.03	1,570,306.99	3,202,144.01	40.896576	-104.768832	
14,800.00	90.00	90.11	8,532.00	-708.13	6,963.03	1,570,308.19	3,202,344.01	40.896575	-104.768108	
15,000.00	90.00	90.11	8,532.00	-708.53	7,163.03	1,570,309.38	3,202,544.01	40.896574	-104.767385	
15,200.00	90.00	90.11	8,532.00	-708.93	7,363.03	1,570,310.58	3,202,744.00	40.896572	-104.766661	
15,400.00	90.00	90.11	8,532.00	-709.33	7,563.03	1,570,311.77	3,202,944.00	40.896571	-104.765938	
15,600.00	90.00	90.11	8,532.00	-709.73	7,763.03	1,570,312.97	3,203,144.00	40.896570	-104.765215	
15,800.00	90.00	90.11	8,532.00	-710.13	7,963.03	1,570,314.16	3,203,343.99	40.896569	-104.764491	
16,000.00	90.00	90.11	8,532.00	-710.53	8,163.02	1,570,315.36	3,203,543.99	40.896567	-104.763768	
16,200.00	90.00	90.11	8,532.00	-710.93	8,363.02	1,570,316.55	3,203,743.99	40.896566	-104.763044	
16,400.00	90.00	90.11	8,532.00	-711.33	8,563.02	1,570,317.75	3,203,943.98	40.896565	-104.762321	
16,600.00	90.00	90.11	8,532.00	-711.72	8,763.02	1,570,318.94	3,204,143.98	40.896563	-104.761598	
16,800.00	90.00	90.11	8,532.00	-712.12	8,963.02	1,570,320.14	3,204,343.98	40.896562	-104.760874	
17,000.00	90.00	90.11	8,532.00	-712.52	9,163.02	1,570,321.33	3,204,543.97	40.896561	-104.760151	
17,200.00	90.00	90.11	8,532.00	-712.92	9,363.02	1,570,322.53	3,204,743.97	40.896560	-104.759427	
17,400.00	90.00	90.11	8,532.00	-713.32	9,563.02	1,570,323.72	3,204,943.96	40.896558	-104.758704	
17,600.00	90.00	90.11	8,532.00	-713.72	9,763.02	1,570,324.92	3,205,143.96	40.896557	-104.757981	
17,800.00	90.00	90.11	8,532.00	-714.12	9,963.02	1,570,326.11	3,205,343.96	40.896556	-104.757257	
18,000.00	90.00	90.11	8,532.00	-714.52	10,163.02	1,570,327.31	3,205,543.95	40.896554	-104.756534	
18,200.00	90.00	90.11	8,532.00	-714.92	10,363.02	1,570,328.50	3,205,743.95	40.896553	-104.755810	
18,346.36	90.00	90.11	8,532.00	-715.21	10,509.38	1,570,329.38	3,205,890.31	40.896552	-104.755281	
TD at 18346.4										

Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Deporter 28-27-2H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5662.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W	MD Reference:	WELL @ 5662.00usft (Original Well Elev)
Site:	Deporter 29-A	North Reference:	True
Well:	Deporter 28-27-2H	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 2H 281 FNL, 550 F - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	1,570,960.81	3,195,375.56	40.898521	-104.793294
BHL 2H 600 FEL, 980 FI - plan hits target center - Point	0.00	0.00	8,532.00	-715.21	10,509.38	1,570,329.38	3,205,890.31	40.896552	-104.755281
EP 2H 600 FWL, 980 FN - plan hits target center - Point	0.00	0.00	8,532.00	-696.53	1,147.03	1,570,273.44	3,196,528.10	40.896609	-104.789145

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
804.44	803.87	-13.37	9.08	Hold 6.09 Inc, 145.8 Az
7,901.84	7,861.23	-636.01	432.23	KOP 8/100
8,983.99	8,532.00	-696.53	1,147.03	EP 90 Inc, 90.11 Az
18,346.36	8,532.00	-715.21	10,509.38	TD at 18346.4