



Edge Energy, LLC

Well Name:

DEPORTER 28-27-6H

Project Name:

Sec. 29-T11N-R66W, Weld County CO

Pad Name:

Deporter 29 A

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
1273.31	15.47	165.36	1263.95	-100.37	26.22	44.99	103.74	Hold 15.47 Inc, 165.36 Az
8131.87	15.47	165.36	7874.15	-1869.94	488.54	838.13	1932.70	KOP 8/100
9208.16	90.00	90.12	8519.00	-2043.97	1202.72	1572.43	2690.95	EP 90 Inc, 90.12 Az
18564.49	90.00	90.12	8519.00	-2063.59	10559.02	10758.78	12047.27	TD at 18564.49

Geodetic Datum:

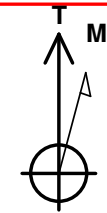
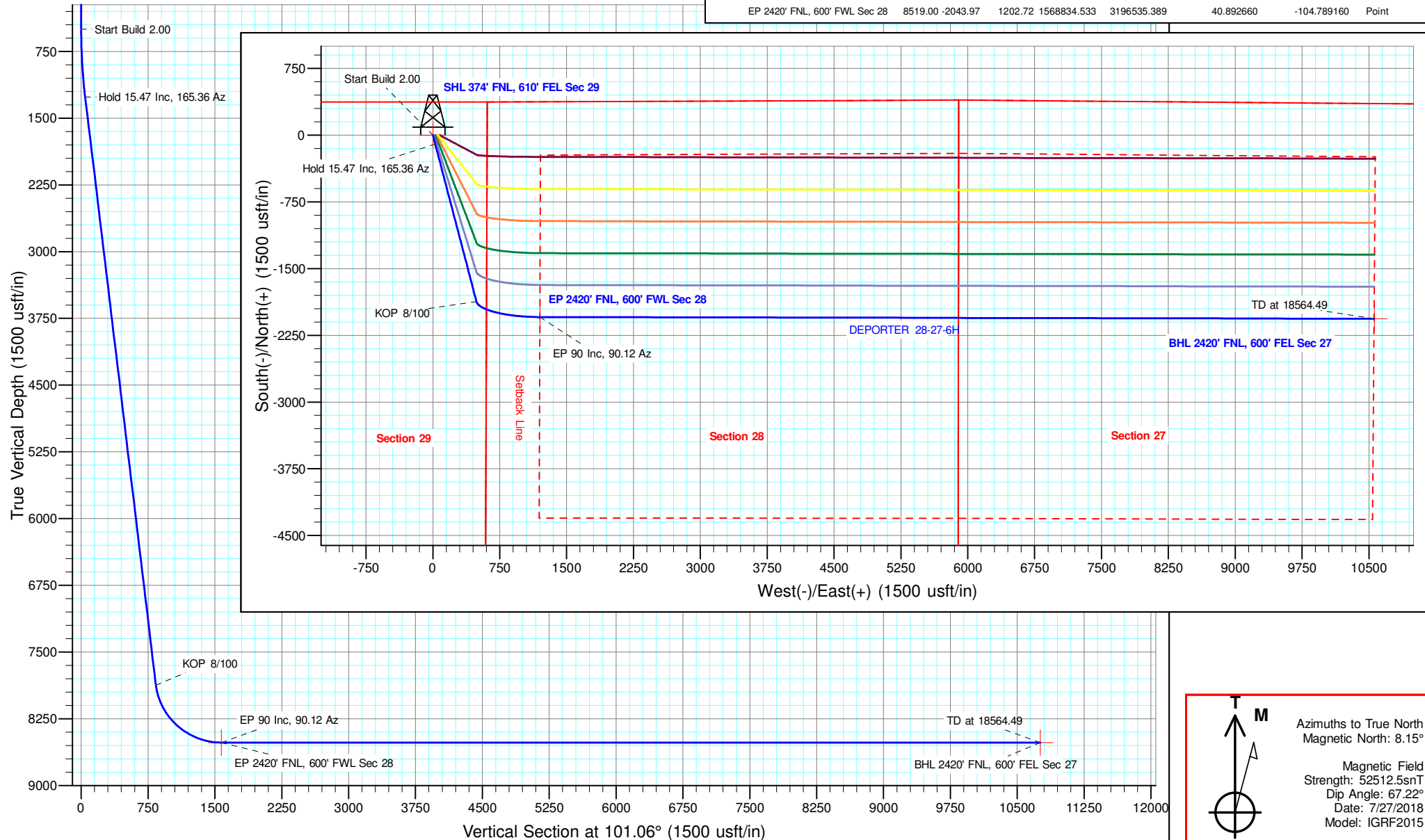
North American Datum 1983
US State Plane 1983, Colorado Northern Zone

Elevation:

Ground Elevation: 5641.00
KB Elevation: WELL @ 5656.00usft (Original Well Elev)

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SHL 374' FNL, 610' FEL Sec 29	0.00	0.00	0.00	1570868.856	3195316.427	40.898270	-104.793510	Point
BHL 2420' FNL, 600' FEL Sec 27	8519.00	-2063.59	10559.02	1568889.460	3205891.552	40.892600	-104.755320	Point
EP 2420' FNL, 600' FWL Sec 28	8519.00	-2043.97	1202.72	1568834.533	3196535.389	40.892660	-104.789160	Point



Azimuths to True North
Magnetic North: 8.15°

Magnetic Field
Strength: 52512.5snT
Dip Angle: 67.22°
Date: 7/27/2018
Model: IGRF2015



Edge Energy, LLC

Sec. 29-T11N-R66W, Weld County CO

Deporter 29 A

DEPORTER 28-27-6H

Wellbore #1

Plan: Design #1 25Jul18 mnh

Standard Planning Report - Geographic

27 July, 2018



Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well DEPORTER 28-27-6H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5656.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W, Weld County CO	MD Reference:	WELL @ 5656.00usft (Original Well Elev)
Site:	Deporter 29 A	North Reference:	True
Well:	DEPORTER 28-27-6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25Jul18 mnH		

Project	Sec. 29-T11N-R66W, Weld County CO		
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:	1,570,919.868 usft	Latitude: 40.898410
From:	Lat/Long	Easting:	3,195,316.021 usft	Longitude: -104.793510
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.46 °

Well	DEPORTER 28-27-6H					
Well Position	+N/-S	0.00 usft	Northing:	1,570,868.857 usft	Latitude:	40.898270
	+E/-W	0.00 usft	Easting:	3,195,316.427 usft	Longitude:	-104.793510
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,641.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/27/2018	8.15	67.22	52,512.45355171

Design	Design #1 25Jul18 mnH			
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	101.06

Plan Survey Tool Program	Date	7/27/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,564.49 Design #1 25Jul18 mnH (Wellbor	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	
1,273.31	15.47	165.36	1,263.95	-100.37	26.22	2.00	2.00	0.00	165.36	
8,131.87	15.47	165.36	7,874.15	-1,869.94	488.54	0.00	0.00	0.00	0.00	
9,208.17	90.00	90.12	8,519.00	-2,043.97	1,202.72	8.00	6.93	-6.99	-75.75	EP 2420' FNL, 600' F'
18,564.49	90.00	90.12	8,519.00	-2,063.59	10,559.02	0.00	0.00	0.00	0.00	BHL 2420' FNL, 600' I



Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well DEPORTER 28-27-6H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5656.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W, Weld County CO	MD Reference:	WELL @ 5656.00usft (Original Well Elev)
Site:	Deporter 29 A	North Reference:	True
Well:	DEPORTER 28-27-6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25Jul18 mnH		

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	1,570,868.857	3,195,316.427	40.898270	-104.793510
200.00	0.00	0.00	200.00	0.00	0.00	1,570,868.857	3,195,316.427	40.898270	-104.793510
400.00	0.00	0.00	400.00	0.00	0.00	1,570,868.857	3,195,316.427	40.898270	-104.793510
500.00	0.00	0.00	500.00	0.00	0.00	1,570,868.857	3,195,316.427	40.898270	-104.793510
Start Build 2.00									
600.00	2.00	165.36	599.98	-1.69	0.44	1,570,867.172	3,195,316.882	40.898265	-104.793509
800.00	6.00	165.36	799.45	-15.18	3.97	1,570,853.705	3,195,320.515	40.898228	-104.793496
1,000.00	10.00	165.36	997.47	-42.11	11.00	1,570,826.837	3,195,327.764	40.898155	-104.793470
1,200.00	14.00	165.36	1,193.06	-82.33	21.51	1,570,786.698	3,195,338.593	40.898044	-104.793432
1,273.31	15.47	165.36	1,263.95	-100.37	26.22	1,570,768.699	3,195,343.449	40.897995	-104.793415
Hold 15.47 Inc, 165.36 Az									
1,400.00	15.47	165.36	1,386.06	-133.06	34.76	1,570,736.080	3,195,352.249	40.897905	-104.793385
1,600.00	15.47	165.36	1,578.81	-184.66	48.24	1,570,684.587	3,195,366.141	40.897763	-104.793336
1,800.00	15.47	165.36	1,771.57	-236.26	61.73	1,570,633.094	3,195,380.033	40.897622	-104.793287
2,000.00	15.47	165.36	1,964.33	-287.86	75.21	1,570,581.602	3,195,393.925	40.897480	-104.793238
2,200.00	15.47	165.36	2,157.09	-339.47	88.69	1,570,530.109	3,195,407.817	40.897338	-104.793189
2,400.00	15.47	165.36	2,349.84	-391.07	102.17	1,570,478.616	3,195,421.709	40.897197	-104.793141
2,600.00	15.47	165.36	2,542.60	-442.67	115.65	1,570,427.124	3,195,435.601	40.897055	-104.793092
2,800.00	15.47	165.36	2,735.36	-494.27	129.13	1,570,375.631	3,195,449.493	40.896914	-104.793043
3,000.00	15.47	165.36	2,928.12	-545.87	142.61	1,570,324.138	3,195,463.385	40.896772	-104.792994
3,200.00	15.47	165.36	3,120.87	-597.47	156.09	1,570,272.645	3,195,477.277	40.896630	-104.792946
3,400.00	15.47	165.36	3,313.63	-649.08	169.58	1,570,221.153	3,195,491.169	40.896489	-104.792897
3,600.00	15.47	165.36	3,506.39	-700.68	183.06	1,570,169.660	3,195,505.061	40.896347	-104.792848
3,800.00	15.47	165.36	3,699.15	-752.28	196.54	1,570,118.167	3,195,518.954	40.896205	-104.792799
4,000.00	15.47	165.36	3,891.90	-803.88	210.02	1,570,066.675	3,195,532.846	40.896064	-104.792751
4,200.00	15.47	165.36	4,084.66	-855.48	223.50	1,570,015.182	3,195,546.738	40.895922	-104.792702
4,400.00	15.47	165.36	4,277.42	-907.08	236.98	1,569,963.689	3,195,560.630	40.895780	-104.792653
4,600.00	15.47	165.36	4,470.18	-958.69	250.46	1,569,912.196	3,195,574.522	40.895639	-104.792604
4,800.00	15.47	165.36	4,662.94	-1,010.29	263.95	1,569,860.704	3,195,588.414	40.895497	-104.792556
5,000.00	15.47	165.36	4,855.69	-1,061.89	277.43	1,569,809.211	3,195,602.306	40.895356	-104.792507
5,200.00	15.47	165.36	5,048.45	-1,113.49	290.91	1,569,757.718	3,195,616.198	40.895214	-104.792458
5,400.00	15.47	165.36	5,241.21	-1,165.09	304.39	1,569,706.226	3,195,630.090	40.895072	-104.792409
5,600.00	15.47	165.36	5,433.97	-1,216.70	317.87	1,569,654.733	3,195,643.982	40.894931	-104.792361
5,800.00	15.47	165.36	5,626.72	-1,268.30	331.35	1,569,603.240	3,195,657.874	40.894789	-104.792312
6,000.00	15.47	165.36	5,819.48	-1,319.90	344.83	1,569,551.747	3,195,671.766	40.894647	-104.792263
6,200.00	15.47	165.36	6,012.24	-1,371.50	358.32	1,569,500.255	3,195,685.658	40.894506	-104.792214
6,400.00	15.47	165.36	6,205.00	-1,423.10	371.80	1,569,448.762	3,195,699.550	40.894364	-104.792166
6,600.00	15.47	165.36	6,397.75	-1,474.70	385.28	1,569,397.269	3,195,713.442	40.894223	-104.792117
6,800.00	15.47	165.36	6,590.51	-1,526.31	398.76	1,569,345.776	3,195,727.335	40.894081	-104.792068
7,000.00	15.47	165.36	6,783.27	-1,577.91	412.24	1,569,294.284	3,195,741.227	40.893939	-104.792019
7,200.00	15.47	165.36	6,976.03	-1,629.51	425.72	1,569,242.791	3,195,755.119	40.893798	-104.791970
7,400.00	15.47	165.36	7,168.78	-1,681.11	439.20	1,569,191.298	3,195,769.011	40.893656	-104.791922
7,600.00	15.47	165.36	7,361.54	-1,732.71	452.69	1,569,139.806	3,195,782.903	40.893514	-104.791873
7,800.00	15.47	165.36	7,554.30	-1,784.31	466.17	1,569,088.313	3,195,796.795	40.893373	-104.791824
8,000.00	15.47	165.36	7,747.06	-1,835.92	479.65	1,569,036.820	3,195,810.687	40.893231	-104.791775
8,131.87	15.47	165.36	7,874.15	-1,869.94	488.54	1,569,002.869	3,195,819.846	40.893138	-104.791743
KOP 8/100									
8,200.00	17.60	147.63	7,939.50	-1,887.44	496.35	1,568,985.430	3,195,827.802	40.893090	-104.791715
8,400.00	29.19	118.74	8,123.32	-1,936.75	555.69	1,568,936.598	3,195,887.527	40.892954	-104.791500
8,600.00	43.51	106.49	8,284.19	-1,980.02	665.18	1,568,894.200	3,195,997.362	40.892836	-104.791104
8,800.00	58.59	99.52	8,409.65	-2,013.90	816.35	1,568,861.521	3,196,148.798	40.892743	-104.790558
9,000.00	73.93	94.54	8,489.98	-2,035.78	997.49	1,568,841.093	3,196,330.100	40.892683	-104.789903
9,200.00	89.37	90.29	8,518.96	-2,043.94	1,194.55	1,568,834.498	3,196,527.224	40.892660	-104.789190



Microsoft
Planning Report - Geographic

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well DEPORTER 28-27-6H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5656.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W, Weld County CO	MD Reference:	WELL @ 5656.00usft (Original Well Elev)
Site:	Deporter 29 A	North Reference:	True
Well:	DEPORTER 28-27-6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25Jul18 mnH		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,208.17	90.00	90.12	8,519.00	-2,043.97	1,202.72	1,568,834.534	3,196,535.389	40.892660	-104.789160	
EP 90 Inc, 90.12 Az										
9,400.00	90.00	90.12	8,519.00	-2,044.37	1,394.55	1,568,835.660	3,196,727.221	40.892659	-104.788466	
9,600.00	90.00	90.12	8,519.00	-2,044.79	1,594.55	1,568,836.834	3,196,927.217	40.892658	-104.787743	
9,800.00	90.00	90.12	8,519.00	-2,045.21	1,794.55	1,568,838.008	3,197,127.214	40.892657	-104.787020	
10,000.00	90.00	90.12	8,519.00	-2,045.63	1,994.55	1,568,839.182	3,197,327.210	40.892655	-104.786296	
10,200.00	90.00	90.12	8,519.00	-2,046.05	2,194.55	1,568,840.356	3,197,527.207	40.892654	-104.785573	
10,400.00	90.00	90.12	8,519.00	-2,046.47	2,394.55	1,568,841.530	3,197,727.203	40.892653	-104.784850	
10,600.00	90.00	90.12	8,519.00	-2,046.89	2,594.55	1,568,842.704	3,197,927.200	40.892652	-104.784126	
10,800.00	90.00	90.12	8,519.00	-2,047.31	2,794.55	1,568,843.878	3,198,127.196	40.892651	-104.783403	
11,000.00	90.00	90.12	8,519.00	-2,047.73	2,994.55	1,568,845.053	3,198,327.193	40.892649	-104.782680	
11,200.00	90.00	90.12	8,519.00	-2,048.15	3,194.55	1,568,846.227	3,198,527.189	40.892648	-104.781956	
11,400.00	90.00	90.12	8,519.00	-2,048.57	3,394.55	1,568,847.401	3,198,727.186	40.892647	-104.781233	
11,600.00	90.00	90.12	8,519.00	-2,048.99	3,594.55	1,568,848.575	3,198,927.183	40.892646	-104.780509	
11,800.00	90.00	90.12	8,519.00	-2,049.40	3,794.54	1,568,849.749	3,199,127.179	40.892644	-104.779786	
12,000.00	90.00	90.12	8,519.00	-2,049.82	3,994.54	1,568,850.923	3,199,327.176	40.892643	-104.779063	
12,200.00	90.00	90.12	8,519.00	-2,050.24	4,194.54	1,568,852.097	3,199,527.172	40.892642	-104.778339	
12,400.00	90.00	90.12	8,519.00	-2,050.66	4,394.54	1,568,853.271	3,199,727.169	40.892641	-104.777616	
12,600.00	90.00	90.12	8,519.00	-2,051.08	4,594.54	1,568,854.445	3,199,927.165	40.892639	-104.776893	
12,800.00	90.00	90.12	8,519.00	-2,051.50	4,794.54	1,568,855.620	3,200,127.162	40.892638	-104.776169	
13,000.00	90.00	90.12	8,519.00	-2,051.92	4,994.54	1,568,856.794	3,200,327.158	40.892637	-104.775446	
13,200.00	90.00	90.12	8,519.00	-2,052.34	5,194.54	1,568,857.968	3,200,527.155	40.892636	-104.774723	
13,400.00	90.00	90.12	8,519.00	-2,052.76	5,394.54	1,568,859.142	3,200,727.151	40.892634	-104.773999	
13,600.00	90.00	90.12	8,519.00	-2,053.18	5,594.54	1,568,860.316	3,200,927.148	40.892633	-104.773276	
13,800.00	90.00	90.12	8,519.00	-2,053.60	5,794.54	1,568,861.490	3,201,127.144	40.892632	-104.772552	
14,000.00	90.00	90.12	8,519.00	-2,054.02	5,994.54	1,568,862.664	3,201,327.141	40.892631	-104.771829	
14,200.00	90.00	90.12	8,519.00	-2,054.44	6,194.54	1,568,863.838	3,201,527.138	40.892629	-104.771106	
14,400.00	90.00	90.12	8,519.00	-2,054.86	6,394.54	1,568,865.012	3,201,727.134	40.892628	-104.770382	
14,600.00	90.00	90.12	8,519.00	-2,055.28	6,594.54	1,568,866.186	3,201,927.131	40.892627	-104.769659	
14,800.00	90.00	90.12	8,519.00	-2,055.69	6,794.54	1,568,867.361	3,202,127.127	40.892625	-104.768936	
15,000.00	90.00	90.12	8,519.00	-2,056.11	6,994.54	1,568,868.535	3,202,327.124	40.892624	-104.768212	
15,200.00	90.00	90.12	8,519.00	-2,056.53	7,194.54	1,568,869.709	3,202,527.120	40.892623	-104.767489	
15,400.00	90.00	90.12	8,519.00	-2,056.95	7,394.54	1,568,870.883	3,202,727.117	40.892621	-104.766766	
15,600.00	90.00	90.12	8,519.00	-2,057.37	7,594.54	1,568,872.057	3,202,927.113	40.892620	-104.766042	
15,800.00	90.00	90.12	8,519.00	-2,057.79	7,794.54	1,568,873.231	3,203,127.110	40.892619	-104.765319	
16,000.00	90.00	90.12	8,519.00	-2,058.21	7,994.54	1,568,874.405	3,203,327.106	40.892618	-104.764596	
16,200.00	90.00	90.12	8,519.00	-2,058.63	8,194.54	1,568,875.579	3,203,527.103	40.892616	-104.763872	
16,400.00	90.00	90.12	8,519.00	-2,059.05	8,394.53	1,568,876.753	3,203,727.100	40.892615	-104.763149	
16,600.00	90.00	90.12	8,519.00	-2,059.47	8,594.53	1,568,877.928	3,203,927.096	40.892614	-104.762425	
16,800.00	90.00	90.12	8,519.00	-2,059.89	8,794.53	1,568,879.102	3,204,127.093	40.892612	-104.761702	
17,000.00	90.00	90.12	8,519.00	-2,060.31	8,994.53	1,568,880.276	3,204,327.089	40.892611	-104.760979	
17,200.00	90.00	90.12	8,519.00	-2,060.73	9,194.53	1,568,881.450	3,204,527.086	40.892609	-104.760255	
17,400.00	90.00	90.12	8,519.00	-2,061.15	9,394.53	1,568,882.624	3,204,727.082	40.892608	-104.759532	
17,600.00	90.00	90.12	8,519.00	-2,061.57	9,594.53	1,568,883.798	3,204,927.079	40.892607	-104.758809	
17,800.00	90.00	90.12	8,519.00	-2,061.98	9,794.53	1,568,884.972	3,205,127.075	40.892605	-104.758085	
18,000.00	90.00	90.12	8,519.00	-2,062.40	9,994.53	1,568,886.146	3,205,327.072	40.892604	-104.757362	
18,200.00	90.00	90.12	8,519.00	-2,062.82	10,194.53	1,568,887.320	3,205,527.068	40.892603	-104.756639	
18,400.00	90.00	90.12	8,519.00	-2,063.24	10,394.53	1,568,888.495	3,205,727.065	40.892601	-104.755915	
18,564.49	90.00	90.12	8,519.00	-2,063.59	10,559.02	1,568,889.460	3,205,891.552	40.892600	-104.755320	
TD at 18564.49										



Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well DEPORTER 28-27-6H
Company:	Edge Energy, LLC	TVD Reference:	WELL @ 5656.00usft (Original Well Elev)
Project:	Sec. 29-T11N-R66W, Weld County CO	MD Reference:	WELL @ 5656.00usft (Original Well Elev)
Site:	Deporter 29 A	North Reference:	True
Well:	DEPORTER 28-27-6H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 25Jul18 mnH		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
SHL 374' FNL, 610' FEL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	1,570,868.857	3,195,316.427	40.898270	-104.793510
BHL 2420' FNL, 600' FE - plan hits target center - Point	0.00	0.00	8,519.00	-2,063.59	10,559.02	1,568,889.460	3,205,891.552	40.892600	-104.755320
EP 2420' FNL, 600' FWL - plan hits target center - Point	0.00	0.00	8,519.00	-2,043.97	1,202.72	1,568,834.534	3,196,535.389	40.892660	-104.789160

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.00	500.00	0.00	0.00	Start Build 2.00
1,273.31	1,263.95	-100.37	26.22	Hold 15.47 Inc, 165.36 Az
8,131.87	7,874.15	-1,869.94	488.54	KOP 8/100
9,208.17	8,519.00	-2,043.97	1,202.72	EP 90 Inc, 90.12 Az
18,564.49	8,519.00	-2,063.59	10,559.02	TD at 18564.49