

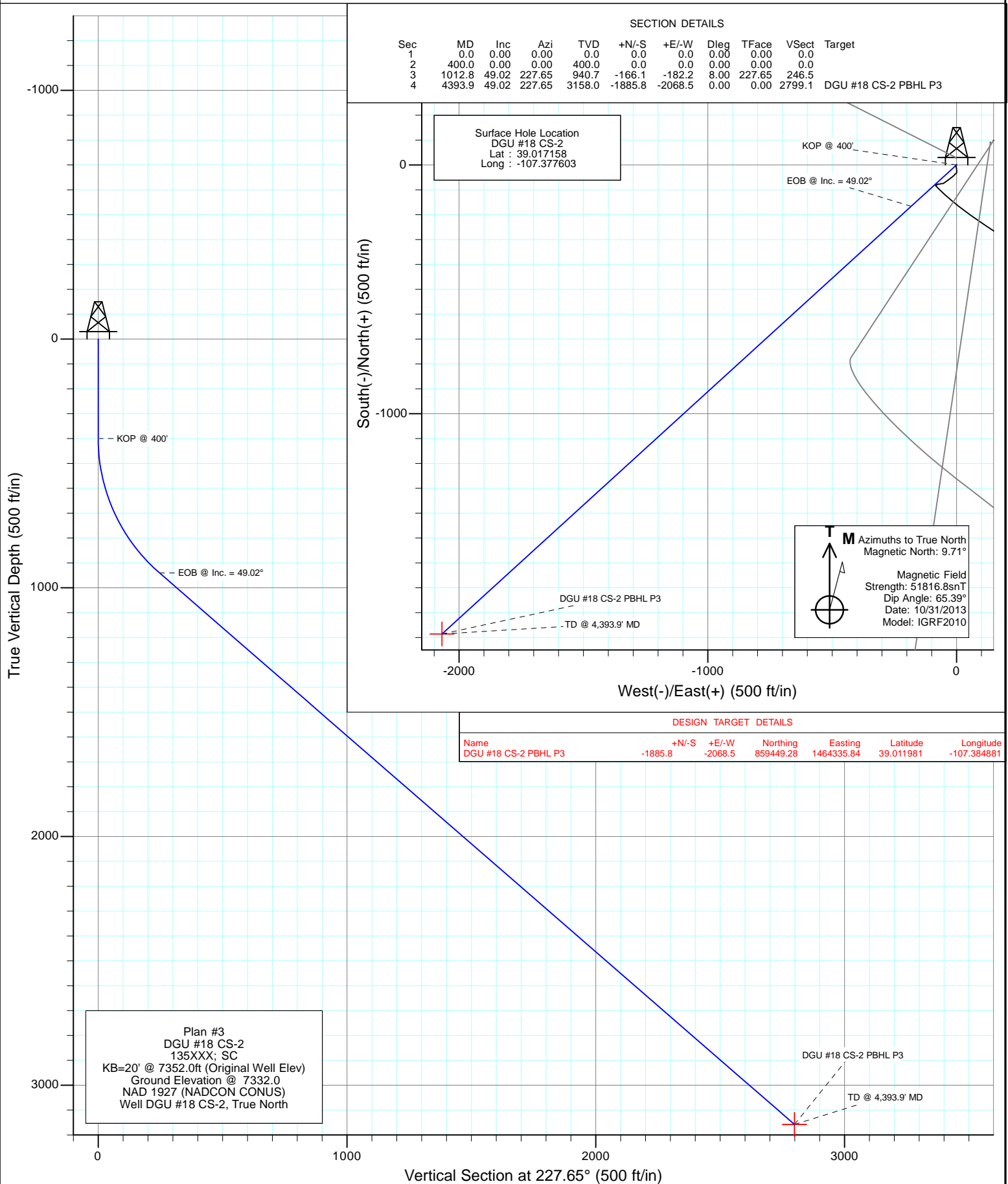


GUNNISON ENERGY CORPORATION

Project: Gunnison County, CO
Site: Deadman Gulch Unit
Well: DGU #18 CS-2
Wellbore: OH
Design: Plan #3



CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DGU #18 CS-2
Company:	Gunnison Energy Corporation	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Project:	Gunnison County, CO	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site:	Deadman Gulch Unit	North Reference:	True
Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Project	Gunnison County, CO		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado South 503		

Site		Deadman Gulch Unit			
Site Position:		Northing:	861,395.66 ft	Latitude:	39.017439
From:	Lat/Long	Easting:	1,466,432.79 ft	Longitude:	-107.377642
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.15 °

Well	DGU #18 CS-2					
Well Position	+N/-S	0.0 ft	Northing:	861,293.08 ft	Latitude:	39.017158
	+E/-W	0.0 ft	Easting:	1,466,441.81 ft	Longitude:	-107.377603
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,332.0 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	10/31/2013	9.71	65.39	51,817

Design	Plan #3				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	227.65	

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,012.8	49.02	227.65	940.7	-166.1	-182.2	8.00	8.00	-21.60	227.65	
4,393.9	49.02	227.65	3,158.0	-1,885.8	-2,068.5	0.00	0.00	0.00	0.00	DGU #18 CS-2 PBHL

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Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
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)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400'
450.0	4.00	227.65	450.0	-1.2	-1.3	1.7	8.00	8.00	
500.0	8.00	227.65	499.7	-4.7	-5.2	7.0	8.00	8.00	
550.0	12.00	227.65	548.9	-10.5	-11.6	15.7	8.00	8.00	
600.0	16.00	227.65	597.4	-18.7	-20.5	27.7	8.00	8.00	
650.0	20.00	227.65	645.0	-29.1	-31.9	43.2	8.00	8.00	
700.0	24.00	227.65	691.3	-41.7	-45.8	61.9	8.00	8.00	
750.0	28.00	227.65	736.2	-56.5	-62.0	83.8	8.00	8.00	
800.0	32.00	227.65	779.5	-73.3	-80.4	108.8	8.00	8.00	
850.0	36.00	227.65	821.0	-92.2	-101.1	136.8	8.00	8.00	
900.0	40.00	227.65	860.4	-112.9	-123.8	167.6	8.00	8.00	
950.0	44.00	227.65	897.5	-135.4	-148.5	201.0	8.00	8.00	
1,000.0	48.00	227.65	932.2	-159.6	-175.1	237.0	8.00	8.00	
1,012.8	49.02	227.65	940.7	-166.1	-182.2	246.5	8.00	8.00	EOB @ Inc. = 49.02°
1,100.0	49.02	227.65	997.9	-210.5	-230.9	312.4	0.00	0.00	
1,200.0	49.02	227.65	1,063.5	-261.3	-286.6	387.9	0.00	0.00	
1,300.0	49.02	227.65	1,129.1	-312.2	-342.4	463.4	0.00	0.00	
1,400.0	49.02	227.65	1,194.6	-363.0	-398.2	538.9	0.00	0.00	
1,500.0	49.02	227.65	1,260.2	-413.9	-454.0	614.4	0.00	0.00	
1,600.0	49.02	227.65	1,325.8	-464.8	-509.8	689.9	0.00	0.00	
1,700.0	49.02	227.65	1,391.4	-515.6	-565.6	765.4	0.00	0.00	
1,800.0	49.02	227.65	1,457.0	-566.5	-621.4	840.8	0.00	0.00	
1,900.0	49.02	227.65	1,522.5	-617.3	-677.2	916.3	0.00	0.00	
2,000.0	49.02	227.65	1,588.1	-668.2	-733.0	991.8	0.00	0.00	
2,100.0	49.02	227.65	1,653.7	-719.1	-788.7	1,067.3	0.00	0.00	
2,200.0	49.02	227.65	1,719.3	-769.9	-844.5	1,142.8	0.00	0.00	
2,300.0	49.02	227.65	1,784.9	-820.8	-900.3	1,218.3	0.00	0.00	
2,400.0	49.02	227.65	1,850.4	-871.7	-956.1	1,293.8	0.00	0.00	
2,500.0	49.02	227.65	1,916.0	-922.5	-1,011.9	1,369.3	0.00	0.00	
2,600.0	49.02	227.65	1,981.6	-973.4	-1,067.7	1,444.8	0.00	0.00	
2,700.0	49.02	227.65	2,047.2	-1,024.2	-1,123.5	1,520.3	0.00	0.00	
2,800.0	49.02	227.65	2,112.8	-1,075.1	-1,179.3	1,595.8	0.00	0.00	
2,900.0	49.02	227.65	2,178.3	-1,126.0	-1,235.1	1,671.3	0.00	0.00	
3,000.0	49.02	227.65	2,243.9	-1,176.8	-1,290.9	1,746.8	0.00	0.00	
3,100.0	49.02	227.65	2,309.5	-1,227.7	-1,346.6	1,822.3	0.00	0.00	
3,200.0	49.02	227.65	2,375.1	-1,278.5	-1,402.4	1,897.8	0.00	0.00	
3,300.0	49.02	227.65	2,440.6	-1,329.4	-1,458.2	1,973.3	0.00	0.00	
3,400.0	49.02	227.65	2,506.2	-1,380.3	-1,514.0	2,048.8	0.00	0.00	
3,500.0	49.02	227.65	2,571.8	-1,431.1	-1,569.8	2,124.2	0.00	0.00	
3,600.0	49.02	227.65	2,637.4	-1,482.0	-1,625.6	2,199.7	0.00	0.00	
3,700.0	49.02	227.65	2,703.0	-1,532.9	-1,681.4	2,275.2	0.00	0.00	
3,800.0	49.02	227.65	2,768.5	-1,583.7	-1,737.2	2,350.7	0.00	0.00	
3,900.0	49.02	227.65	2,834.1	-1,634.6	-1,793.0	2,426.2	0.00	0.00	
4,000.0	49.02	227.65	2,899.7	-1,685.4	-1,848.8	2,501.7	0.00	0.00	
4,100.0	49.02	227.65	2,965.3	-1,736.3	-1,904.5	2,577.2	0.00	0.00	
4,200.0	49.02	227.65	3,030.9	-1,787.2	-1,960.3	2,652.7	0.00	0.00	
4,300.0	49.02	227.65	3,096.4	-1,838.0	-2,016.1	2,728.2	0.00	0.00	
4,393.9	49.02	227.65	3,158.0	-1,885.8	-2,068.5	2,799.1	0.00	0.00	TD @ 4,393.9' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DGU #18 CS-2
Company:	Gunnison Energy Corporation	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Project:	Gunnison County, CO	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site:	Deadman Gulch Unit	North Reference:	True
Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
DMGU #18 CS-2 PBHL	0.00	358.84	3,027.0	-1,822.8	-1,919.3	859,509.27	1,464,486.29	39.012154	-107.384356
- plan misses target center by 54.0ft at 4192.7ft MD (3026.1 TVD, -1783.4 N, -1956.2 E)									
- Point									
DGU #18 CS-2 PBHL P1	0.00	358.84	3,158.0	-1,885.8	-2,068.5	859,449.28	1,464,335.84	39.011981	-107.384881
- plan hits target center									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
400.0	400.0	0.0	0.0	KOP @ 400'
1,012.8	940.7	-166.1	-182.2	EOB @ Inc. = 49.02°
4,393.9	3,158.0	-1,885.8	-2,068.5	TD @ 4,393.9' MD

Gunnison Energy Corporation

Gunnison County, CO

Deadman Gulch Unit

DGU #18 CS-2

OH

Plan #3

Anticollision Report

18 December, 2013

Cathedral Energy Services

Anticollision Report

Company:	Gunnison Energy Corporation	Local Co-ordinate Reference:	Well DGU #18 CS-2
Project:	Gunnison County, CO	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Reference Site:	Deadman Gulch Unit	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference	Plan #3		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 500.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	12/18/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	4,393.9	Plan #3 (OH)	MWD	MWD	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Deadman Gulch Unit						
DGU #18 CS-1 - OH - Plan #3	400.0	400.0	29.5	28.2	22.234	CC, ES
DGU #18 CS-1 - OH - Plan #3	500.0	498.8	35.0	33.3	20.829	SF
Existing Hotchkiss Federal #18-2H - Existing - Existing	120.6	120.6	4.9	4.8	28.067	CC
Existing Hotchkiss Federal #18-2H - Existing - Existing	492.6	492.3	5.3	4.5	6.340	ES
Existing Hotchkiss Federal #18-2H - Existing - Existing	500.0	499.6	5.4	4.6	6.312	SF
DGU Hotchkiss Federal #1289 Pad						
DGU Hotchkiss Fed 1289 #18-H3 - HZ - Plan #2	400.0	399.7	210.1	208.8	158.468	CC, ES
DGU Hotchkiss Fed 1289 #18-H3 - HZ - Plan #2	600.0	597.1	237.9	235.9	120.404	SF
DGU Hotchkiss Fed 1289 #18-H4 - HZ - Plan #4	400.0	399.7	178.7	177.4	134.766	CC, ES
DGU Hotchkiss Fed 1289 #18-H4 - HZ - Plan #4	600.0	597.1	206.1	204.2	104.126	SF
DGU Hotchkiss Fed 1289 #18-H5 - HZ - Plan #3	400.0	399.7	163.8	162.5	123.568	CC, ES
DGU Hotchkiss Fed 1289 #18-H5 - HZ - Plan #3	600.0	597.1	191.3	189.3	96.638	SF

Cathedral Energy Services

Anticollision Report

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Project:	Gunnison County, CO	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Reference Site:	Deadman Gulch Unit	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-2.76	29.5	-1.4	29.5				
100.0	100.0	100.0	100.0	0.1	0.1	-2.76	29.5	-1.4	29.5	29.2	0.28	105.594	
200.0	200.0	200.0	200.0	0.3	0.3	-2.76	29.5	-1.4	29.5	28.9	0.63	46.936	
300.0	300.0	300.0	300.0	0.5	0.5	-2.76	29.5	-1.4	29.5	28.5	0.98	30.174	
400.0	400.0	400.0	400.0	0.7	0.7	-2.76	29.5	-1.4	29.5	28.2	1.33	22.234 CC, ES	
500.0	499.7	498.8	498.8	0.9	0.8	135.61	30.2	-2.9	35.0	33.3	1.68	20.829 SF	
600.0	597.4	594.5	593.5	1.2	1.1	136.82	36.0	-14.4	55.2	53.1	2.12	25.989	
700.0	691.3	685.0	680.8	1.8	1.4	134.31	46.7	-35.5	89.6	86.8	2.82	31.802	
800.0	779.5	768.3	757.9	2.6	2.0	130.82	60.8	-63.5	136.9	133.1	3.83	35.727	
900.0	860.4	843.1	823.6	3.7	2.6	126.78	76.9	-95.3	195.4	190.2	5.15	37.962	
1,000.0	932.2	909.0	878.3	5.1	3.3	121.99	93.6	-128.3	263.1	256.4	6.74	39.051	
1,100.0	997.9	968.6	924.4	6.6	4.1	122.14	110.5	-161.8	336.4	328.0	8.41	39.983	
1,200.0	1,063.5	1,032.7	971.7	8.1	4.9	122.16	130.0	-200.5	411.1	400.9	10.20	40.298	
1,300.0	1,129.1	1,099.1	1,020.5	9.6	5.8	122.15	150.3	-240.7	485.9	473.8	12.02	40.406	

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Reference Site:	Deadman Gulch Unit	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design												Deadman Gulch Unit - Existing Hotchkiss Federal #18-2H - Existing - Existing		Offset Site Error:		0.0 ft
Survey Program: 100-														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning			
0.0	0.0	0.0	0.0	0.0	0.0	-152.93	-4.4	-2.3	5.0							
100.0	100.0	100.0	100.0	0.1	0.0	-151.55	-4.3	-2.4	4.9	4.8	0.14	35.354				
120.6	120.6	120.6	120.6	0.2	0.0	-151.11	-4.3	-2.4	4.9	4.8	0.18	28.067	CC			
200.0	200.0	200.0	200.0	0.3	0.0	-152.05	-4.5	-2.4	5.1	4.8	0.31	16.178				
300.0	300.0	300.0	300.0	0.5	0.0	-155.56	-5.2	-2.4	5.7	5.2	0.49	11.722				
400.0	400.0	399.9	399.9	0.7	0.0	-162.33	-6.6	-2.1	7.0	6.3	0.66	10.497				
492.6	492.4	492.3	492.3	0.8	0.0	-80.12	-8.5	-1.5	5.3	4.5	0.84	6.340	ES			
500.0	499.7	499.6	499.6	0.9	0.0	-89.88	-8.7	-1.5	5.4	4.6	0.86	6.312	SF			
600.0	597.4	597.6	597.5	1.2	0.0	-158.20	-11.0	-0.9	21.0	20.0	1.02	20.588				
700.0	691.3	691.9	691.8	1.8	0.0	-168.60	-13.5	-0.3	53.5	52.3	1.18	45.527				
800.0	779.5	780.8	780.6	2.6	0.0	-172.24	-15.5	0.0	99.1	97.7	1.32	74.824				
900.0	860.4	862.0	861.9	3.7	0.0	-173.99	-17.1	0.1	156.6	155.2	1.47	106.763				
1,000.0	932.2	934.7	934.6	5.1	0.0	-174.70	-18.7	0.5	225.2	223.6	1.61	139.666				
1,100.0	997.9	1,002.1	1,001.9	6.6	0.0	-175.64	-20.0	0.6	299.7	297.9	1.81	166.013				
1,200.0	1,063.5	1,068.4	1,068.2	8.1	0.0	-176.29	-21.3	0.5	374.3	372.3	2.00	186.838				
1,300.0	1,129.1	1,134.4	1,134.2	9.6	0.0	-176.73	-22.6	0.5	448.9	446.7	2.20	204.073				

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Project:	Gunnison County, CO	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Reference Site:	Deadman Gulch Unit	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design													DGU Hotchkiss Federal #1289 Pad - DGU Hotchkiss Fed 1289 #18-H3 - HZ - Plan #2		Offset Site Error:		0.0 ft
Survey Program:													0-MWD		Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor					
0.0	0.0	0.0	0.0	0.0	0.0	49.71	135.9	160.3	210.1								
100.0	100.0	99.7	99.7	0.1	0.1	49.71	135.9	160.3	210.1	209.8	0.28	753.448					
200.0	200.0	199.7	199.7	0.3	0.3	49.71	135.9	160.3	210.1	209.5	0.63	334.677					
300.0	300.0	299.7	299.7	0.5	0.5	49.71	135.9	160.3	210.1	209.1	0.98	215.092					
400.0	400.0	399.7	399.7	0.7	0.7	49.71	135.9	160.3	210.1	208.8	1.33	158.468	CC, ES				
500.0	499.7	499.4	499.4	0.9	0.8	-177.98	135.9	160.3	217.1	215.4	1.66	130.426					
600.0	597.4	597.1	597.1	1.2	1.0	-178.10	135.9	160.3	237.9	235.9	1.98	120.404	SF				
700.0	691.3	691.0	691.0	1.8	1.2	-178.25	135.9	160.3	272.0	269.8	2.25	120.869					
800.0	779.5	779.2	779.2	2.6	1.3	-178.40	135.9	160.3	318.9	316.4	2.48	128.416					
900.0	860.4	860.1	860.1	3.7	1.5	-178.50	135.9	160.3	377.6	375.0	2.67	141.353					
1,000.0	932.2	931.9	931.9	5.1	1.6	-178.55	135.9	160.3	447.0	444.2	2.82	158.724					

Cathedral Energy Services

Anticollision Report

Company:	Gunnison Energy Corporation	Local Co-ordinate Reference:	Well DGU #18 CS-2
Project:	Gunnison County, CO	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Reference Site:	Deadman Gulch Unit	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design														Offset Site Error:	0.0 ft
Survey Program: 0-MWD														Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	56.61	98.3	149.2	178.7						
100.0	100.0	99.7	99.7	0.1	0.1	56.61	98.3	149.2	178.7	178.4	0.28	640.764			
200.0	200.0	199.7	199.7	0.3	0.3	56.61	98.3	149.2	178.7	178.1	0.63	284.618			
300.0	300.0	299.7	299.7	0.5	0.5	56.61	98.3	149.2	178.7	177.7	0.98	182.920			
400.0	400.0	399.7	399.7	0.7	0.7	56.61	98.3	149.2	178.7	177.4	1.33	134.766 CC, ES			
500.0	499.7	499.4	499.4	0.9	0.8	-171.29	98.3	149.2	185.6	183.9	1.67	111.453			
600.0	597.4	597.1	597.1	1.2	1.0	-171.93	98.3	149.2	206.1	204.2	1.98	104.126 SF			
700.0	691.3	691.0	691.0	1.8	1.2	-172.72	98.3	149.2	240.1	237.8	2.26	106.075			
800.0	779.5	779.2	779.2	2.6	1.3	-173.44	98.3	149.2	286.7	284.2	2.51	114.263			
900.0	860.4	860.1	860.1	3.7	1.5	-173.97	98.3	149.2	345.2	342.5	2.72	127.092			
1,000.0	932.2	932.0	932.0	5.1	1.6	-174.25	98.3	149.2	414.4	411.5	2.89	143.437			
1,100.0	997.9	997.6	997.6	6.6	1.7	-175.04	98.3	149.2	489.7	486.5	3.17	154.591			

Cathedral Energy Services

Anticollision Report

Company:	Gunnison Energy Corporation	Local Co-ordinate Reference:	Well DGU #18 CS-2
Project:	Gunnison County, CO	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Reference Site:	Deadman Gulch Unit	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Offset Design											DGU Hotchkiss Federal #1289 Pad - DGU Hotchkiss Fed 1289 #18-H5 - HZ - Plan #3			Offset Site Error:		0.0 ft
Survey Program:											0-MWD			Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
0.0	0.0	0.0	0.0	0.0	0.0	56.54	90.3	136.7	163.8							
100.0	100.0	99.7	99.7	0.1	0.1	56.54	90.3	136.7	163.8	163.6	0.28	587.511				
200.0	200.0	199.7	199.7	0.3	0.3	56.54	90.3	136.7	163.8	163.2	0.63	260.969				
300.0	300.0	299.7	299.7	0.5	0.5	56.54	90.3	136.7	163.8	162.9	0.98	167.721				
400.0	400.0	399.7	399.7	0.7	0.7	56.54	90.3	136.7	163.8	162.5	1.33	123.568	CC, ES			
500.0	499.7	499.4	499.4	0.9	0.8	-171.38	90.3	136.7	170.7	169.1	1.67	102.538				
600.0	597.4	597.1	597.1	1.2	1.0	-172.09	90.3	136.7	191.3	189.3	1.98	96.638	SF			
700.0	691.3	691.0	691.0	1.8	1.2	-172.94	90.3	136.7	225.2	223.0	2.26	99.558				
800.0	779.5	779.2	779.2	2.6	1.3	-173.70	90.3	136.7	271.9	269.4	2.51	108.454				
900.0	860.4	860.1	860.1	3.7	1.5	-174.27	90.3	136.7	330.4	327.7	2.71	121.849				
1,000.0	932.2	931.9	931.9	5.1	1.6	-174.58	90.3	136.7	399.6	396.8	2.88	138.725				
1,100.0	997.9	997.6	997.6	6.6	1.7	-175.34	90.3	136.7	474.9	471.8	3.16	150.418				

Cathedral Energy Services

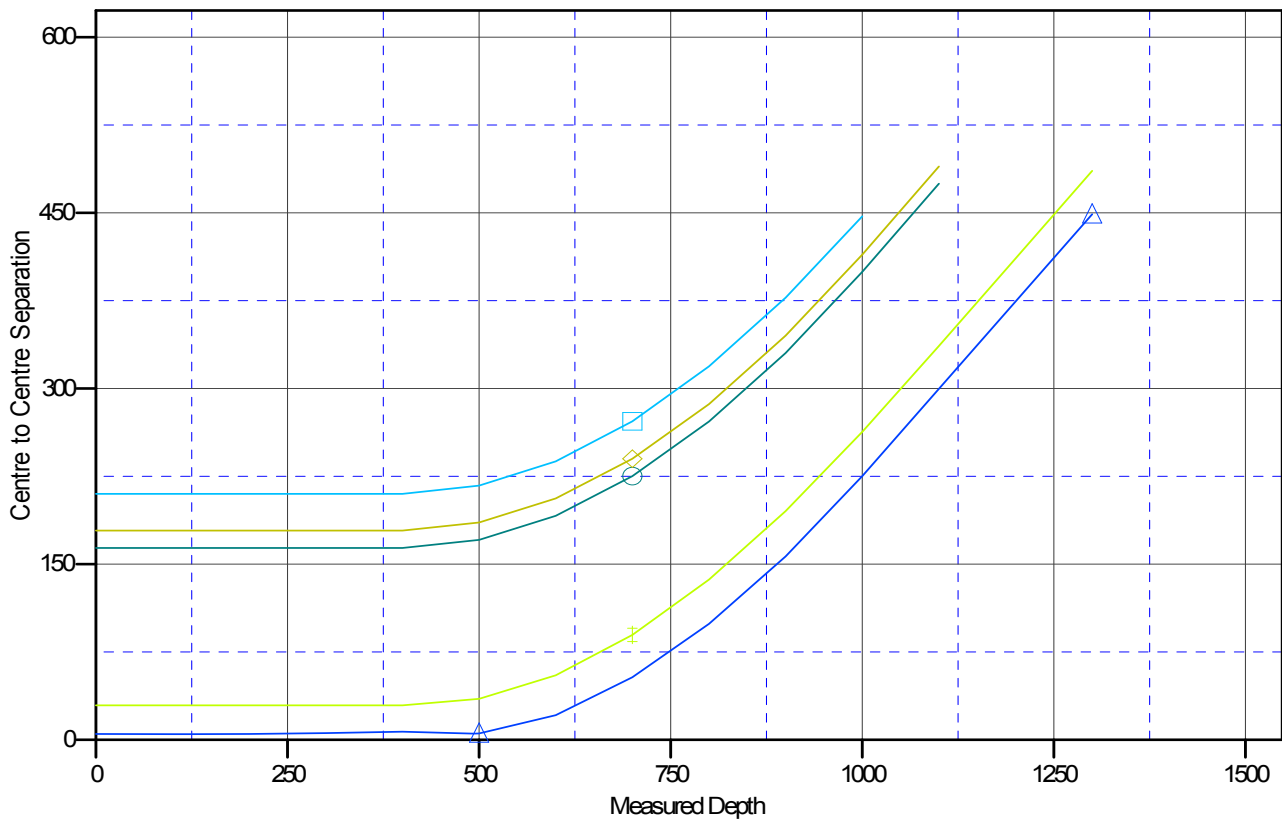
Anticollision Report

Company:	Gunnison Energy Corporation	Local Co-ordinate Reference:	Well DGU #18 CS-2
Project:	Gunnison County, CO	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Reference Site:	Deadman Gulch Unit	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #3	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=20' @ 7352.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: DGU #18 CS-2
 Coordinate System is US State Plane 1927 (Exact solution), Colorado South 503
 Grid Convergence at Surface is: -1.15°

Ladder Plot



LEGEND

g Hotchkiss Federal #18-2H, Existing, Existing V0
 #18 CS-1, OH, Plan #3 V0

DGU Hotchkiss Fed 1289#18-H3, HZ, Plan #2 V0
 DGU Hotchkiss Fed 1289#18-H5, HZ, Plan #3 V0

DGU Hotchkiss Fed 1289#18-H4, HZ, Plan #3 V0

Gunnison Energy Corporation

Gunnison County, CO

Deadman Gulch Unit

DGU #18 CS-2

OH

Plan: Plan #3

Standard Planning Report - Geographic

18 December, 2013

Cathedral Energy Services

Planning Report - Geographic

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DGU #18 CS-2
Company:	Gunnison Energy Corporation	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Project:	Gunnison County, CO	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site:	Deadman Gulch Unit	North Reference:	True
Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Project	Gunnison County, CO		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado South 503		

Site		Deadman Gulch Unit			
Site Position:		Northing:	861,395.65 ft	Latitude:	39.017439
From:	Lat/Long	Easting:	1,466,432.79 ft	Longitude:	-107.377642
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.15 °

Well		DGU #18 CS-2				
Well Position	+N/-S	0.0 ft	Northing:	861,293.08 ft	Latitude:	39.017158
	+E/-W	0.0 ft	Easting:	1,466,441.82 ft	Longitude:	-107.377603
Position Uncertainty		0.0 ft	Wellhead Elevation:		Ground Level:	7,332.0 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/31/2013	9.71	65.39	51,817

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	227.65

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,012.8	49.02	227.65	940.7	-166.1	-182.2	8.00	8.00	-21.60	227.65	
4,393.9	49.02	227.65	3,158.0	-1,885.8	-2,068.5	0.00	0.00	0.00	0.00	DGU #18 CS-2 PBHL

Cathedral Energy Services

Planning Report - Geographic

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DGU #18 CS-2
Company:	Gunnison Energy Corporation	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Project:	Gunnison County, CO	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site:	Deadman Gulch Unit	North Reference:	True
Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	861,293.08	1,466,441.82	39.017158	-107.377603
100.0	0.00	0.00	100.0	0.0	0.0	861,293.08	1,466,441.82	39.017158	-107.377603
200.0	0.00	0.00	200.0	0.0	0.0	861,293.08	1,466,441.82	39.017158	-107.377603
300.0	0.00	0.00	300.0	0.0	0.0	861,293.08	1,466,441.82	39.017158	-107.377603
400.0	0.00	0.00	400.0	0.0	0.0	861,293.08	1,466,441.82	39.017158	-107.377603
KOP @ 400'									
450.0	4.00	227.65	450.0	-1.2	-1.3	861,291.93	1,466,440.50	39.017155	-107.377608
500.0	8.00	227.65	499.7	-4.7	-5.2	861,288.49	1,466,436.57	39.017145	-107.377621
550.0	12.00	227.65	548.9	-10.5	-11.6	861,282.77	1,466,430.04	39.017129	-107.377644
600.0	16.00	227.65	597.4	-18.7	-20.5	861,274.81	1,466,420.94	39.017107	-107.377675
650.0	20.00	227.65	645.0	-29.1	-31.9	861,264.63	1,466,409.32	39.017078	-107.377716
700.0	24.00	227.65	691.3	-41.7	-45.8	861,252.29	1,466,395.23	39.017044	-107.377764
750.0	28.00	227.65	736.2	-56.5	-62.0	861,237.86	1,466,378.74	39.017003	-107.377821
800.0	32.00	227.65	779.5	-73.3	-80.4	861,221.39	1,466,359.94	39.016957	-107.377886
850.0	36.00	227.65	821.0	-92.2	-101.1	861,202.98	1,466,338.91	39.016905	-107.377959
900.0	40.00	227.65	860.4	-112.9	-123.8	861,182.71	1,466,315.75	39.016848	-107.378039
950.0	44.00	227.65	897.5	-135.4	-148.5	861,160.67	1,466,290.58	39.016786	-107.378126
1,000.0	48.00	227.65	932.2	-159.6	-175.1	861,136.99	1,466,263.53	39.016720	-107.378219
1,012.8	49.02	227.65	940.7	-166.1	-182.2	861,130.69	1,466,256.34	39.016702	-107.378244
EOB @ Inc. = 49.02°									
1,100.0	49.02	227.65	997.9	-210.5	-230.9	861,087.31	1,466,206.78	39.016580	-107.378416
1,200.0	49.02	227.65	1,063.5	-261.3	-286.6	861,037.58	1,466,149.98	39.016441	-107.378612
1,300.0	49.02	227.65	1,129.1	-312.2	-342.4	860,987.85	1,466,093.18	39.016301	-107.378808
1,400.0	49.02	227.65	1,194.6	-363.0	-398.2	860,938.12	1,466,036.38	39.016161	-107.379004
1,500.0	49.02	227.65	1,260.2	-413.9	-454.0	860,888.39	1,465,979.58	39.016022	-107.379201
1,600.0	49.02	227.65	1,325.8	-464.8	-509.8	860,838.66	1,465,922.78	39.015882	-107.379397
1,700.0	49.02	227.65	1,391.4	-515.6	-565.6	860,788.93	1,465,865.98	39.015743	-107.379593
1,800.0	49.02	227.65	1,457.0	-566.5	-621.4	860,739.20	1,465,809.18	39.015603	-107.379790
1,900.0	49.02	227.65	1,522.5	-617.3	-677.2	860,689.47	1,465,752.38	39.015463	-107.379986
2,000.0	49.02	227.65	1,588.1	-668.2	-733.0	860,639.74	1,465,695.58	39.015324	-107.380182
2,100.0	49.02	227.65	1,653.7	-719.1	-788.7	860,590.01	1,465,638.78	39.015184	-107.380379
2,200.0	49.02	227.65	1,719.3	-769.9	-844.5	860,540.28	1,465,581.98	39.015044	-107.380575
2,300.0	49.02	227.65	1,784.9	-820.8	-900.3	860,490.55	1,465,525.17	39.014905	-107.380771
2,400.0	49.02	227.65	1,850.4	-871.7	-956.1	860,440.82	1,465,468.37	39.014765	-107.380968
2,500.0	49.02	227.65	1,916.0	-922.5	-1,011.9	860,391.09	1,465,411.57	39.014626	-107.381164
2,600.0	49.02	227.65	1,981.6	-973.4	-1,067.7	860,341.36	1,465,354.77	39.014486	-107.381360
2,700.0	49.02	227.65	2,047.2	-1,024.2	-1,123.5	860,291.63	1,465,297.97	39.014346	-107.381556
2,800.0	49.02	227.65	2,112.8	-1,075.1	-1,179.3	860,241.90	1,465,241.17	39.014207	-107.381753
2,900.0	49.02	227.65	2,178.3	-1,126.0	-1,235.1	860,192.17	1,465,184.37	39.014067	-107.381949
3,000.0	49.02	227.65	2,243.9	-1,176.8	-1,290.9	860,142.44	1,465,127.57	39.013927	-107.382145
3,100.0	49.02	227.65	2,309.5	-1,227.7	-1,346.6	860,092.71	1,465,070.77	39.013788	-107.382342
3,200.0	49.02	227.65	2,375.1	-1,278.5	-1,402.4	860,042.98	1,465,013.97	39.013648	-107.382538
3,300.0	49.02	227.65	2,440.6	-1,329.4	-1,458.2	859,993.25	1,464,957.17	39.013508	-107.382734
3,400.0	49.02	227.65	2,506.2	-1,380.3	-1,514.0	859,943.52	1,464,900.37	39.013369	-107.382930
3,500.0	49.02	227.65	2,571.8	-1,431.1	-1,569.8	859,893.79	1,464,843.57	39.013229	-107.383127
3,600.0	49.02	227.65	2,637.4	-1,482.0	-1,625.6	859,844.06	1,464,786.77	39.013090	-107.383323
3,700.0	49.02	227.65	2,703.0	-1,532.9	-1,681.4	859,794.33	1,464,729.97	39.012950	-107.383519
3,800.0	49.02	227.65	2,768.5	-1,583.7	-1,737.2	859,744.60	1,464,673.16	39.012810	-107.383716
3,900.0	49.02	227.65	2,834.1	-1,634.6	-1,793.0	859,694.87	1,464,616.36	39.012671	-107.383912
4,000.0	49.02	227.65	2,899.7	-1,685.4	-1,848.8	859,645.14	1,464,559.56	39.012531	-107.384108
4,100.0	49.02	227.65	2,965.3	-1,736.3	-1,904.5	859,595.41	1,464,502.76	39.012391	-107.384304
4,200.0	49.02	227.65	3,030.9	-1,787.2	-1,960.3	859,545.69	1,464,445.96	39.012252	-107.384501
4,300.0	49.02	227.65	3,096.4	-1,838.0	-2,016.1	859,495.96	1,464,389.16	39.012112	-107.384697

Cathedral Energy Services

Planning Report - Geographic

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DGU #18 CS-2
Company:	Gunnison Energy Corporation	TVD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Project:	Gunnison County, CO	MD Reference:	KB=20' @ 7352.0ft (Original Well Elev)
Site:	Deadman Gulch Unit	North Reference:	True
Well:	DGU #18 CS-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
4,393.9	49.02	227.65	3,158.0	-1,885.8	-2,068.5	859,449.27	1,464,335.84	39.011981	-107.384881	
TD @ 4,393.9' MD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
DGU #18 CS-2 PBHL P1	0.00	358.84	3,158.0	-1,885.8	-2,068.5	859,449.27	1,464,335.84	39.011981	-107.384881	
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
400.0	400.0	0.0	0.0	KOP @ 400'	
1,012.8	940.7	-166.1	-182.2	EOB @ Inc. = 49.02°	
4,393.9	3,158.0	-1,885.8	-2,068.5	TD @ 4,393.9' MD	