

GREAT WESTERN OPERATING COMPANY

WELD COUNTY

SEC 8-T3N-R67W

BERRY IC 11-042HNX

OWB

Plan: PROPOSAL 1

Standard Planning Report

03 September, 2021

Project: WELD COUNTY
Site: SEC 8-T3N-R67W
Well: BERRY IC 11-042HNX
Wellbore: OWB
Design: PROPOSAL 1



Azimuths to True North
Magnetic North: 7.90°

Magnetic Field
Strength: 51832.8nT
Dip Angle: 66.50°
Date: 9/3/2021
Model: IGRF2020

WELL DETAILS: BERRY IC 11-042HNX

+N/-S	+E/-W	Northing	Easting	4843.00	Latitude	Longitude	Slot
0.00	0.00	1332316.57	3161683.98		40.244158°N	104.920796°W	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	5350.00	0.00	0.00	5350.00	0.00	0.00	0.00	0.00	0.00	
3	5840.36	14.71	6.25	5834.99	62.23	6.81	3.00	6.25	-4.28	
4	6242.76	14.71	6.25	6224.20	163.81	17.93	0.00	0.00	-11.27	
5	7381.16	90.00	272.02	6930.00	373.78	-691.17	8.00	-94.09	705.76	BERRY 042HNX-LP
6	12539.88	90.00	272.02	6930.00	555.87	-5846.68	0.00	0.00	5864.42	BERRY 042HNX-MID PNT
7	12635.54	90.00	269.15	6930.00	556.85	-5942.32	3.00	-90.00	5960.02	BERRY 042HNX-BTM PERF
8	18234.81	90.00	269.15	6930.00	474.08	-11540.98	0.00	0.00	11550.71	BERRY 042HNX-BTM PERF
9	18236.10	90.00	269.19	6930.00	474.07	-11542.27	3.00	90.00	11552.00	BERRY 042HNX-PBHL
10	18334.76	90.00	269.19	6930.00	472.67	-11640.92	0.00	0.00	11650.51	BERRY 042HNX-PBHL

FORMATION TOP DETAILS

Formation data is available

PROJECT DETAILS: WELD COUNTY

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level

SHL:
1306' FNL, 690' FWL
Sec 8-T3N-R67W

LP:
940' FNL, 1' FEL
Sec 7-T3N-R67W

MID POINT:
940' FNL, 0' FWL
Sec 7-T3N-R67W

BTM PERF:
939' FNL, 370' FEL
Sec 11-T3N-R68W

BHL:
940' FNL, 470' FEL
Sec 11-T3N-R68W

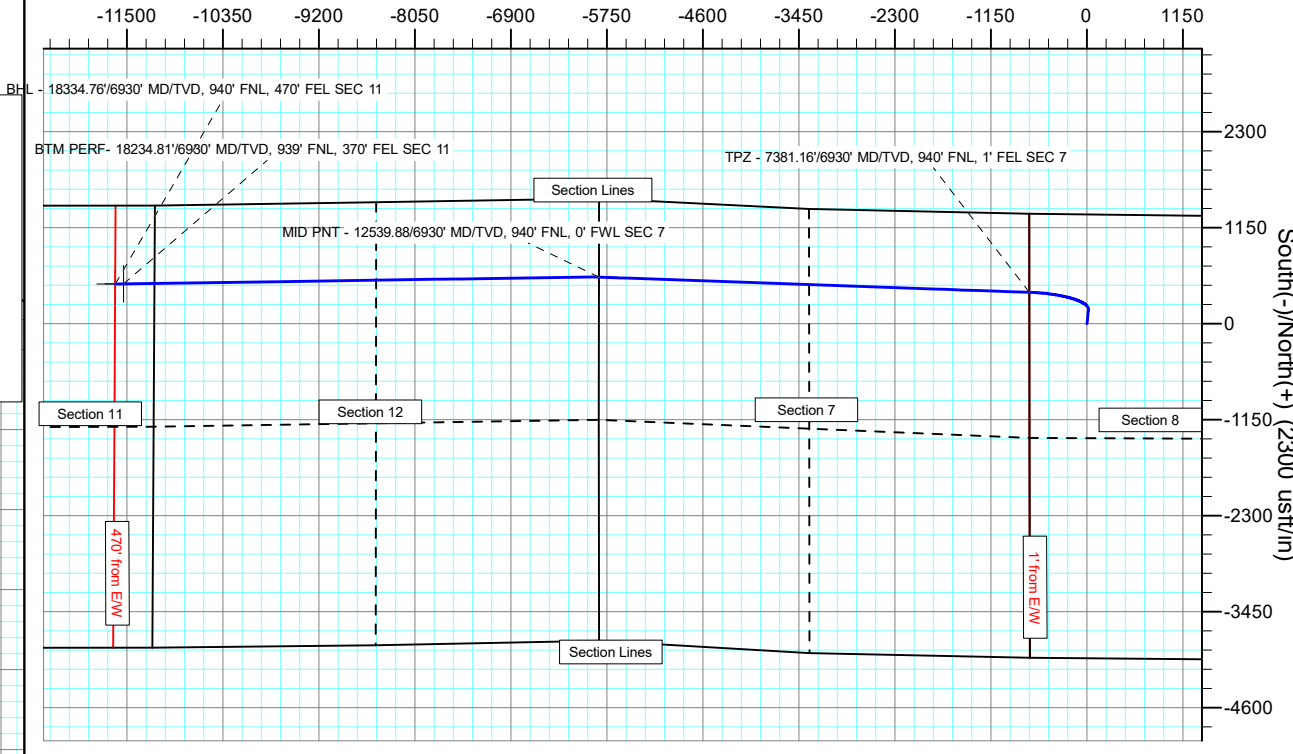
ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
5350.00	0.00	0.00	5350.00	0.00	0.00	0.00	0.00	Start Build 3.00
5840.36	14.71	6.25	5834.99	62.23	6.81	-4.28	62.61	Start 402.40 hold at 5840.36 MD
6242.76	14.71	6.25	6224.20	163.81	17.93	-11.27	164.79	Start DLS 8.00 TFO -94.09
7381.16	90.00	272.02	6930.00	373.78	-691.17	705.76	937.53	TPZ - 7381.16/6930' MD/TVD, 940' FNL, 1' FEL SEC 7
12539.88	90.00	272.02	6930.00	555.87	-5846.68	5864.42	6096.25	MID PNT - 12539.88/6930' MD/TVD, 940' FNL, 0' FWL SEC 7
12635.54	90.00	269.15	6930.00	556.85	-5942.32	5960.02	6191.91	Start 5599.27 hold at 12635.54 MD
18234.81	90.00	269.15	6930.00	474.08	-11540.98	11550.71	11791.18	BTM PERF - 18234.81/6930' MD/TVD, 939' FNL, 370' FEL SEC 11
18236.10	90.00	269.19	6930.00	474.07	-11542.27	11552.00	11792.47	Start 98.66 hold at 18236.10 MD
18334.76	90.00	269.19	6930.00	472.67	-11640.92	11650.51	11891.13	BHL - 18334.76/6930' MD/TVD, 940' FNL, 470' FEL SEC 11

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BERRY 042HNX-BTM PERF	6930.00	474.08	-11540.98	1332715.26	3150140.15	40.245452°N	104.962140°W	Point
- plan hits target center								
BERRY 042HNX-LP	6930.00	373.78	-691.17	1332685.82	3160990.39	40.245184°N	104.923272°W	Point
- plan hits target center								
BERRY 042HNX-MID PNT	6930.00	555.87	-5846.68	1332834.24	3155833.80	40.245682°N	104.941741°W	Point
- plan hits target center								
BERRY 042HNX-PBHL	6930.00	472.67	-11640.92	1332713.20	3150040.23	40.245448°N	104.962498°W	Point
- plan hits target center								

West(-)/East(+) (2300 usft/in)



South(-)/North(+) (2300 usft/in)

True Vertical Depth (2300 usft/in)

MID PNT - 12539.88/6930' MD/TVD, 940' FNL, 0' FWL SEC 7
BTM PERF - 18234.81/6930' MD/TVD, 939' FNL, 370' FEL SEC 11
BHL - 18334.76/6930' MD/TVD, 940' FNL, 470' FEL SEC 11
TPZ - 7381.16/6930' MD/TVD, 940' FNL, 1' FEL SEC 7

Vertical Section at 272.33° (2300 usft/in)

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well BERRY IC 11-042HNNX
Company:	GREAT WESTERN OPERATING COMPANY	TVD Reference:	KB 20' @ 4863.00usft
Project:	WELD COUNTY	MD Reference:	KB 20' @ 4863.00usft
Site:	SEC 8-T3N-R67W	North Reference:	True
Well:	BERRY IC 11-042HNNX	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Project	WELD COUNTY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		SEC 8-T3N-R67W				
Site Position:		Northing:	1,333,626.02	usft	Latitude:	40.247765°N
From:	Lat/Long	Easting:	3,160,984.00	usft	Longitude:	104.923273°W
Position Uncertainty:		0.00	usft	Slot Radius:	13.200	in

Well		BERRY IC 11-042HNX				
Well Position	+N/-S	0.00 usft	Northing:	1,332,316.57 usft	Latitude:	40.244158°N
	+E/-W	0.00 usft	Easting:	3,161,683.98 usft	Longitude:	104.920796°W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,843.00 usft
Grid Convergence:		0.37 °				

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	9/3/2021	7.90	66.50	51,832.75800334

Design	PROPOSAL 1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	272.33	

Plan Survey Tool Program	Date	9/3/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	18,334.67 PROPOSAL 1 (OWB)	MWD		
			OWSG MWD - Standard		

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Site:	SEC 8-T3N-R67W	North Reference:	True
Well:	BERRY IC 11-042HNNX	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,350.00	0.00	0.00	5,350.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,840.36	14.71	6.25	5,834.99	62.23	6.81	3.00	3.00	0.00	6.25	
6,242.76	14.71	6.25	6,224.20	163.81	17.93	0.00	0.00	0.00	0.00	
7,381.16	90.00	272.02	6,930.00	373.78	-691.17	8.00	6.61	-8.28	-94.09	BERRY 042HNNX-LP
12,539.88	90.00	272.02	6,930.00	555.87	-5,846.68	0.00	0.00	0.00	0.00	BERRY 042HNNX-MID
12,635.54	90.00	269.15	6,930.00	556.85	-5,942.32	3.00	0.00	-3.00	-90.00	BERRY 042HNNX-BTN
18,234.81	90.00	269.15	6,930.00	474.08	-11,540.98	0.00	0.00	0.00	0.00	BERRY 042HNNX-BTN
18,236.10	90.00	269.19	6,930.00	474.07	-11,542.27	3.00	0.00	3.00	90.00	BERRY 042HNNX-PBT
18,334.76	90.00	269.19	6,930.00	472.67	-11,640.92	0.00	0.00	0.00	0.00	BERRY 042HNNX-PBT

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Company:	GREAT WESTERN OPERATING COMPANY	TVD Reference:	KB 20' @ 4863.00usft
Project:	WELD COUNTY	MD Reference:	KB 20' @ 4863.00usft
Site:	SEC 8-T3N-R67W	North Reference:	True
Well:	BERRY IC 11-042HNX	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	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	
5,350.00	0.00	0.00	5,350.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 3.00										
5,400.00	1.50	6.25	5,399.99	0.65	0.07	-0.04	3.00	3.00	0.00	
5,500.00	4.50	6.25	5,499.85	5.85	0.64	-0.40	3.00	3.00	0.00	
5,600.00	7.50	6.25	5,599.29	16.24	1.78	-1.12	3.00	3.00	0.00	
5,700.00	10.50	6.25	5,698.04	31.79	3.48	-2.19	3.00	3.00	0.00	
5,800.00	13.50	6.25	5,795.85	52.46	5.74	-3.61	3.00	3.00	0.00	
5,840.36	14.71	6.25	5,834.99	62.23	6.81	-4.28	3.00	3.00	0.00	
Start 402.40 hold at 5840.36 MD										
5,900.00	14.71	6.25	5,892.68	77.29	8.46	-5.32	0.00	0.00	0.00	
6,000.00	14.71	6.25	5,989.40	102.53	11.23	-7.06	0.00	0.00	0.00	
6,100.00	14.71	6.25	6,086.12	127.78	13.99	-8.79	0.00	0.00	0.00	
6,200.00	14.71	6.25	6,182.84	153.02	16.75	-10.53	0.00	0.00	0.00	
6,242.76	14.71	6.25	6,224.20	163.81	17.93	-11.27	0.00	0.00	0.00	
Start DLS 8.00 TFO -94.09										
6,250.00	14.68	3.97	6,231.20	165.64	18.10	-11.36	8.00	-0.42	-31.49	
6,300.00	15.08	348.42	6,279.55	178.34	17.23	-9.98	8.00	0.79	-31.09	
6,350.00	16.44	334.54	6,327.68	191.10	12.88	-5.12	8.00	2.73	-27.77	
6,400.00	18.57	323.23	6,375.38	203.87	5.07	3.21	8.00	4.25	-22.61	
6,450.00	21.22	314.42	6,422.40	216.59	-6.16	14.95	8.00	5.31	-17.63	
6,500.00	24.24	307.59	6,468.52	229.19	-20.77	30.05	8.00	6.02	-13.66	
6,550.00	27.49	302.24	6,513.51	241.61	-38.67	48.44	8.00	6.50	-10.70	
6,600.00	30.90	297.96	6,557.16	253.79	-59.78	70.03	8.00	6.83	-8.55	
6,650.00	34.43	294.47	6,599.24	265.67	-84.00	94.70	8.00	7.06	-6.98	
6,700.00	38.05	291.57	6,639.57	277.20	-111.20	122.36	8.00	7.23	-5.81	
6,750.00	41.72	289.10	6,677.93	288.31	-141.27	152.85	8.00	7.35	-4.94	
6,800.00	45.44	286.96	6,714.14	298.96	-174.04	186.02	8.00	7.44	-4.27	
6,850.00	49.20	285.09	6,748.04	309.08	-209.36	221.73	8.00	7.51	-3.75	
6,900.00	52.98	283.41	6,779.44	318.64	-247.07	259.79	8.00	7.56	-3.35	
6,950.00	56.78	281.90	6,808.20	327.59	-286.96	300.02	8.00	7.61	-3.03	
7,000.00	60.60	280.51	6,834.18	335.87	-328.86	342.22	8.00	7.64	-2.78	
7,050.00	64.44	279.22	6,857.25	343.46	-372.56	386.18	8.00	7.67	-2.58	
7,100.00	68.28	278.01	6,877.30	350.31	-417.83	431.70	8.00	7.69	-2.42	
7,150.00	72.13	276.87	6,894.23	356.40	-464.48	478.55	8.00	7.70	-2.29	
7,200.00	75.99	275.77	6,907.95	361.68	-512.25	526.50	8.00	7.72	-2.19	
7,250.00	79.85	274.71	6,918.42	366.14	-560.93	575.32	8.00	7.73	-2.12	
7,300.00	83.72	273.67	6,925.56	369.75	-610.28	624.77	8.00	7.73	-2.07	
7,350.00	87.59	272.65	6,929.35	372.50	-660.05	674.62	8.00	7.74	-2.04	
7,381.16	90.00	272.02	6,930.00	373.78	-691.17	705.76	8.00	7.74	-2.03	
Start 5158.73 hold at 7381.16 MD										
7,400.00	90.00	272.02	6,930.00	374.44	-710.00	724.61	0.00	0.00	0.00	
7,500.00	90.00	272.02	6,930.00	377.97	-809.94	824.60	0.00	0.00	0.00	
7,600.00	90.00	272.02	6,930.00	381.50	-909.87	924.60	0.00	0.00	0.00	
7,700.00	90.00	272.02	6,930.00	385.03	-1,009.81	1,024.60	0.00	0.00	0.00	
7,800.00	90.00	272.02	6,930.00	388.56	-1,109.75	1,124.60	0.00	0.00	0.00	
7,900.00	90.00	272.02	6,930.00	392.09	-1,209.69	1,224.60	0.00	0.00	0.00	
8,000.00	90.00	272.02	6,930.00	395.62	-1,309.62	1,324.60	0.00	0.00	0.00	
8,100.00	90.00	272.02	6,930.00	399.15	-1,409.56	1,424.60	0.00	0.00	0.00	
8,200.00	90.00	272.02	6,930.00	402.68	-1,509.50	1,524.59	0.00	0.00	0.00	
8,300.00	90.00	272.02	6,930.00	406.21	-1,609.44	1,624.59	0.00	0.00	0.00	
8,400.00	90.00	272.02	6,930.00	409.74	-1,709.38	1,724.59	0.00	0.00	0.00	
8,500.00	90.00	272.02	6,930.00	413.27	-1,809.31	1,824.59	0.00	0.00	0.00	
8,600.00	90.00	272.02	6,930.00	416.80	-1,909.25	1,924.59	0.00	0.00	0.00	

Planning Report

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Company:	GREAT WESTERN OPERATING COMPANY	TVD Reference:	KB 20' @ 4863.00usft
Project:	WELD COUNTY	MD Reference:	KB 20' @ 4863.00usft
Site:	SEC 8-T3N-R67W	North Reference:	True
Well:	BERRY IC 11-042HNX	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,700.00	90.00	272.02	6,930.00	420.33	-2,009.19	2,024.59	0.00	0.00	0.00
8,800.00	90.00	272.02	6,930.00	423.86	-2,109.13	2,124.59	0.00	0.00	0.00
8,900.00	90.00	272.02	6,930.00	427.39	-2,209.06	2,224.58	0.00	0.00	0.00
9,000.00	90.00	272.02	6,930.00	430.92	-2,309.00	2,324.58	0.00	0.00	0.00
9,100.00	90.00	272.02	6,930.00	434.45	-2,408.94	2,424.58	0.00	0.00	0.00
9,200.00	90.00	272.02	6,930.00	437.98	-2,508.88	2,524.58	0.00	0.00	0.00
9,300.00	90.00	272.02	6,930.00	441.51	-2,608.81	2,624.58	0.00	0.00	0.00
9,400.00	90.00	272.02	6,930.00	445.04	-2,708.75	2,724.58	0.00	0.00	0.00
9,500.00	90.00	272.02	6,930.00	448.57	-2,808.69	2,824.58	0.00	0.00	0.00
9,600.00	90.00	272.02	6,930.00	452.10	-2,908.63	2,924.58	0.00	0.00	0.00
9,700.00	90.00	272.02	6,930.00	455.63	-3,008.57	3,024.57	0.00	0.00	0.00
9,800.00	90.00	272.02	6,930.00	459.16	-3,108.50	3,124.57	0.00	0.00	0.00
9,900.00	90.00	272.02	6,930.00	462.69	-3,208.44	3,224.57	0.00	0.00	0.00
10,000.00	90.00	272.02	6,930.00	466.22	-3,308.38	3,324.57	0.00	0.00	0.00
10,100.00	90.00	272.02	6,930.00	469.75	-3,408.32	3,424.57	0.00	0.00	0.00
10,200.00	90.00	272.02	6,930.00	473.28	-3,508.25	3,524.57	0.00	0.00	0.00
10,300.00	90.00	272.02	6,930.00	476.81	-3,608.19	3,624.57	0.00	0.00	0.00
10,400.00	90.00	272.02	6,930.00	480.34	-3,708.13	3,724.56	0.00	0.00	0.00
10,500.00	90.00	272.02	6,930.00	483.87	-3,808.07	3,824.56	0.00	0.00	0.00
10,600.00	90.00	272.02	6,930.00	487.40	-3,908.00	3,924.56	0.00	0.00	0.00
10,700.00	90.00	272.02	6,930.00	490.93	-4,007.94	4,024.56	0.00	0.00	0.00
10,800.00	90.00	272.02	6,930.00	494.46	-4,107.88	4,124.56	0.00	0.00	0.00
10,900.00	90.00	272.02	6,930.00	497.99	-4,207.82	4,224.56	0.00	0.00	0.00
11,000.00	90.00	272.02	6,930.00	501.51	-4,307.76	4,324.56	0.00	0.00	0.00
11,100.00	90.00	272.02	6,930.00	505.04	-4,407.69	4,424.55	0.00	0.00	0.00
11,200.00	90.00	272.02	6,930.00	508.57	-4,507.63	4,524.55	0.00	0.00	0.00
11,300.00	90.00	272.02	6,930.00	512.10	-4,607.57	4,624.55	0.00	0.00	0.00
11,400.00	90.00	272.02	6,930.00	515.63	-4,707.51	4,724.55	0.00	0.00	0.00
11,500.00	90.00	272.02	6,930.00	519.16	-4,807.44	4,824.55	0.00	0.00	0.00
11,600.00	90.00	272.02	6,930.00	522.69	-4,907.38	4,924.55	0.00	0.00	0.00
11,700.00	90.00	272.02	6,930.00	526.22	-5,007.32	5,024.55	0.00	0.00	0.00
11,800.00	90.00	272.02	6,930.00	529.75	-5,107.26	5,124.54	0.00	0.00	0.00
11,900.00	90.00	272.02	6,930.00	533.28	-5,207.19	5,224.54	0.00	0.00	0.00
12,000.00	90.00	272.02	6,930.00	536.81	-5,307.13	5,324.54	0.00	0.00	0.00
12,100.00	90.00	272.02	6,930.00	540.34	-5,407.07	5,424.54	0.00	0.00	0.00
12,200.00	90.00	272.02	6,930.00	543.87	-5,507.01	5,524.54	0.00	0.00	0.00
12,300.00	90.00	272.02	6,930.00	547.40	-5,606.95	5,624.54	0.00	0.00	0.00
12,400.00	90.00	272.02	6,930.00	550.93	-5,706.88	5,724.54	0.00	0.00	0.00
12,500.00	90.00	272.02	6,930.00	554.46	-5,806.82	5,824.53	0.00	0.00	0.00
12,539.88	90.00	272.02	6,930.00	555.87	-5,846.68	5,864.42	0.00	0.00	0.00
Start DLS 3.00 TFO -90.00									
12,600.00	90.00	270.22	6,930.00	557.05	-5,906.78	5,924.52	3.00	0.00	-3.00
12,635.54	90.00	269.15	6,930.00	556.85	-5,942.32	5,960.02	3.00	0.00	-3.00
Start 5599.27 hold at 12635.54 MD									
12,700.00	90.00	269.15	6,930.00	555.90	-6,006.77	6,024.38	0.00	0.00	0.00
12,800.00	90.00	269.15	6,930.00	554.42	-6,106.76	6,124.23	0.00	0.00	0.00
12,900.00	90.00	269.15	6,930.00	552.94	-6,206.75	6,224.08	0.00	0.00	0.00
13,000.00	90.00	269.15	6,930.00	551.46	-6,306.74	6,323.92	0.00	0.00	0.00
13,100.00	90.00	269.15	6,930.00	549.99	-6,406.73	6,423.77	0.00	0.00	0.00
13,200.00	90.00	269.15	6,930.00	548.51	-6,506.72	6,523.62	0.00	0.00	0.00
13,300.00	90.00	269.15	6,930.00	547.03	-6,606.71	6,623.46	0.00	0.00	0.00
13,400.00	90.00	269.15	6,930.00	545.55	-6,706.70	6,723.31	0.00	0.00	0.00
13,500.00	90.00	269.15	6,930.00	544.07	-6,806.69	6,823.16	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well BERRY IC 11-042HNX
Company:	GREAT WESTERN OPERATING COMPANY	TVD Reference:	KB 20' @ 4863.00usft
Project:	WELD COUNTY	MD Reference:	KB 20' @ 4863.00usft
Site:	SEC 8-T3N-R67W	North Reference:	True
Well:	BERRY IC 11-042HNX	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,600.00	90.00	269.15	6,930.00	542.60	-6,906.68	6,923.00	0.00	0.00	0.00
13,700.00	90.00	269.15	6,930.00	541.12	-7,006.66	7,022.85	0.00	0.00	0.00
13,800.00	90.00	269.15	6,930.00	539.64	-7,106.65	7,122.70	0.00	0.00	0.00
13,900.00	90.00	269.15	6,930.00	538.16	-7,206.64	7,222.54	0.00	0.00	0.00
14,000.00	90.00	269.15	6,930.00	536.68	-7,306.63	7,322.39	0.00	0.00	0.00
14,100.00	90.00	269.15	6,930.00	535.20	-7,406.62	7,422.24	0.00	0.00	0.00
14,200.00	90.00	269.15	6,930.00	533.73	-7,506.61	7,522.08	0.00	0.00	0.00
14,300.00	90.00	269.15	6,930.00	532.25	-7,606.60	7,621.93	0.00	0.00	0.00
14,400.00	90.00	269.15	6,930.00	530.77	-7,706.59	7,721.78	0.00	0.00	0.00
14,500.00	90.00	269.15	6,930.00	529.29	-7,806.58	7,821.62	0.00	0.00	0.00
14,600.00	90.00	269.15	6,930.00	527.81	-7,906.57	7,921.47	0.00	0.00	0.00
14,700.00	90.00	269.15	6,930.00	526.34	-8,006.56	8,021.32	0.00	0.00	0.00
14,800.00	90.00	269.15	6,930.00	524.86	-8,106.54	8,121.16	0.00	0.00	0.00
14,900.00	90.00	269.15	6,930.00	523.38	-8,206.53	8,221.01	0.00	0.00	0.00
15,000.00	90.00	269.15	6,930.00	521.90	-8,306.52	8,320.86	0.00	0.00	0.00
15,100.00	90.00	269.15	6,930.00	520.42	-8,406.51	8,420.70	0.00	0.00	0.00
15,200.00	90.00	269.15	6,930.00	518.94	-8,506.50	8,520.55	0.00	0.00	0.00
15,300.00	90.00	269.15	6,930.00	517.47	-8,606.49	8,620.40	0.00	0.00	0.00
15,400.00	90.00	269.15	6,930.00	515.99	-8,706.48	8,720.24	0.00	0.00	0.00
15,500.00	90.00	269.15	6,930.00	514.51	-8,806.47	8,820.09	0.00	0.00	0.00
15,600.00	90.00	269.15	6,930.00	513.03	-8,906.46	8,919.94	0.00	0.00	0.00
15,700.00	90.00	269.15	6,930.00	511.55	-9,006.45	9,019.78	0.00	0.00	0.00
15,800.00	90.00	269.15	6,930.00	510.08	-9,106.44	9,119.63	0.00	0.00	0.00
15,900.00	90.00	269.15	6,930.00	508.60	-9,206.42	9,219.48	0.00	0.00	0.00
16,000.00	90.00	269.15	6,930.00	507.12	-9,306.41	9,319.33	0.00	0.00	0.00
16,100.00	90.00	269.15	6,930.00	505.64	-9,406.40	9,419.17	0.00	0.00	0.00
16,200.00	90.00	269.15	6,930.00	504.16	-9,506.39	9,519.02	0.00	0.00	0.00
16,300.00	90.00	269.15	6,930.00	502.68	-9,606.38	9,618.87	0.00	0.00	0.00
16,400.00	90.00	269.15	6,930.00	501.21	-9,706.37	9,718.71	0.00	0.00	0.00
16,500.00	90.00	269.15	6,930.00	499.73	-9,806.36	9,818.56	0.00	0.00	0.00
16,600.00	90.00	269.15	6,930.00	498.25	-9,906.35	9,918.41	0.00	0.00	0.00
16,700.00	90.00	269.15	6,930.00	496.77	-10,006.34	10,018.25	0.00	0.00	0.00
16,800.00	90.00	269.15	6,930.00	495.29	-10,106.33	10,118.10	0.00	0.00	0.00
16,900.00	90.00	269.15	6,930.00	493.82	-10,206.31	10,217.95	0.00	0.00	0.00
17,000.00	90.00	269.15	6,930.00	492.34	-10,306.30	10,317.79	0.00	0.00	0.00
17,100.00	90.00	269.15	6,930.00	490.86	-10,406.29	10,417.64	0.00	0.00	0.00
17,200.00	90.00	269.15	6,930.00	489.38	-10,506.28	10,517.49	0.00	0.00	0.00
17,300.00	90.00	269.15	6,930.00	487.90	-10,606.27	10,617.33	0.00	0.00	0.00
17,400.00	90.00	269.15	6,930.00	486.42	-10,706.26	10,717.18	0.00	0.00	0.00
17,500.00	90.00	269.15	6,930.00	484.95	-10,806.25	10,817.03	0.00	0.00	0.00
17,600.00	90.00	269.15	6,930.00	483.47	-10,906.24	10,916.87	0.00	0.00	0.00
17,700.00	90.00	269.15	6,930.00	481.99	-11,006.23	11,016.72	0.00	0.00	0.00
17,800.00	90.00	269.15	6,930.00	480.51	-11,106.22	11,116.57	0.00	0.00	0.00
17,900.00	90.00	269.15	6,930.00	479.03	-11,206.21	11,216.41	0.00	0.00	0.00
18,000.00	90.00	269.15	6,930.00	477.56	-11,306.19	11,316.26	0.00	0.00	0.00
18,100.00	90.00	269.15	6,930.00	476.08	-11,406.18	11,416.11	0.00	0.00	0.00
18,200.00	90.00	269.15	6,930.00	474.60	-11,506.17	11,515.95	0.00	0.00	0.00
18,234.81	90.00	269.15	6,930.00	474.08	-11,540.98	11,550.71	0.00	0.00	0.00
Start Turn 3.00									
18,236.10	90.00	269.19	6,930.00	474.07	-11,542.27	11,552.00	3.00	0.00	3.00
Start 98.66 hold at 18236.10 MD									
18,300.00	90.00	269.19	6,930.00	473.16	-11,606.16	11,615.80	0.00	0.00	0.00
18,334.76	90.00	269.19	6,930.00	472.67	-11,640.92	11,650.51	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well BERRY IC 11-042HNX
Company:	GREAT WESTERN OPERATING COMPANY	TVD Reference:	KB 20' @ 4863.00usft
Project:	WELD COUNTY	MD Reference:	KB 20' @ 4863.00usft
Site:	SEC 8-T3N-R67W	North Reference:	True
Well:	BERRY IC 11-042HNX	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
TD at 18334.76									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BERRY 042HNX-LP - plan hits target center - Point	0.00	0.00	6,930.00	373.78	-691.17	1,332,685.82	3,160,990.39	40.245184°N	104.923272°W
BERRY 042HNX-BTM P - plan hits target center - Point	0.00	0.00	6,930.00	474.08	-11,540.98	1,332,715.26	3,150,140.15	40.245452°N	104.962140°W
BERRY 042HNX-PBHL - plan hits target center - Point	0.00	0.00	6,930.00	472.67	-11,640.92	1,332,713.20	3,150,040.23	40.245448°N	104.962498°W
BERRY 042HNX-MID PI - plan hits target center - Point	0.00	0.00	6,930.00	555.87	-5,846.68	1,332,834.24	3,155,833.80	40.245682°N	104.941741°W

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
5,350.00	5,350.00	0.00	0.00	Start Build 3.00	
5,840.36	5,834.99	62.23	6.81	Start 402.40 hold at 5840.36 MD	
6,242.76	6,224.20	163.81	17.93	Start DLS 8.00 TFO -94.09	
7,381.16	6,930.00	373.78	-691.17	Start 5158.73 hold at 7381.16 MD	
12,539.88	6,930.00	555.87	-5,846.68	Start DLS 3.00 TFO -90.00	
12,635.54	6,930.00	556.85	-5,942.32	Start 5599.27 hold at 12635.54 MD	
18,234.81	6,930.00	474.08	-11,540.98	Start Turn 3.00	
18,236.10	6,930.00	474.07	-11,542.27	Start 98.66 hold at 18236.10 MD	
18,334.76	6,930.00	472.67	-11,640.92	TD at 18334.76	