



US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_GEIB 1-26 PAD

P_GEIB 26-26

P_GEIB 26-26

Plan: PLAN #1 1-19-10 RHS

Standard Planning Report

19 January, 2010





Azimuths to True North
 Magnetic North: 8.97°
 Magnetic Field
 Strength: 53283.8nT
 Dip Angle: 67.10°
 Date: 1/19/2010
 Model: IGRF2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3530.00	3564.08	PARKMAN
4230.00	4274.19	SUSSEX
6642.00	6701.94	NIO A
6954.00	7013.94	CODELL
7390.00	7449.94	JSAND

WELL DETAILS: P_GEIB 26-26

+N/-S	+E/-W	Northing	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	1380869.48	4642.00	40° 22' 32.045 N	104° 37' 21.101 W	
			Easting			
			3244469.12			

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	
1334.19	9.68	30.23	1331.89	35.27	20.55	2.00	30.23	40.82	
5217.75	9.68	30.23	5160.11	599.70	349.44	0.00	0.00	694.08	
5701.94	0.00	0.00	5642.00	634.97	369.99	2.00	180.00	734.90	
7599.94	0.00	0.00	7540.00	634.97	369.99	0.00	0.00	734.90	PBHL_GEIB 26-26(50 FNL 50 FEL)50' TGT RAD

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7540.00	634.97	369.99	1381508.08	3244832.81	40° 22' 38.320 N	104° 37' 16.320 W	Circle (Radius: 50.00)

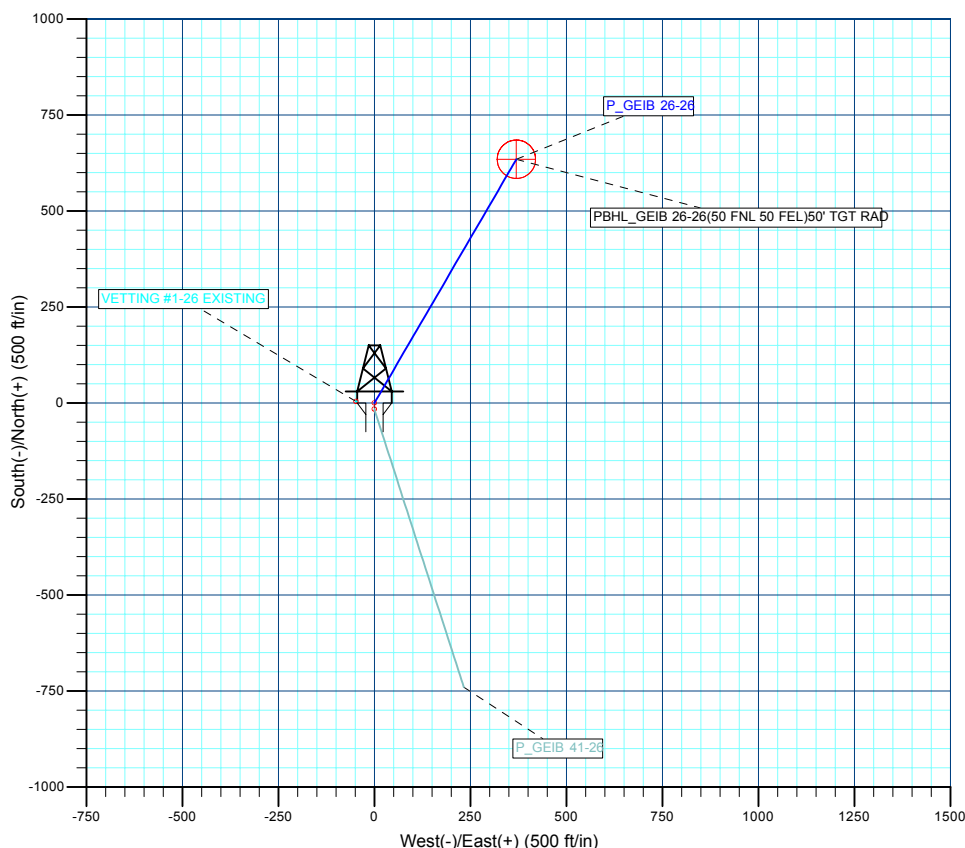
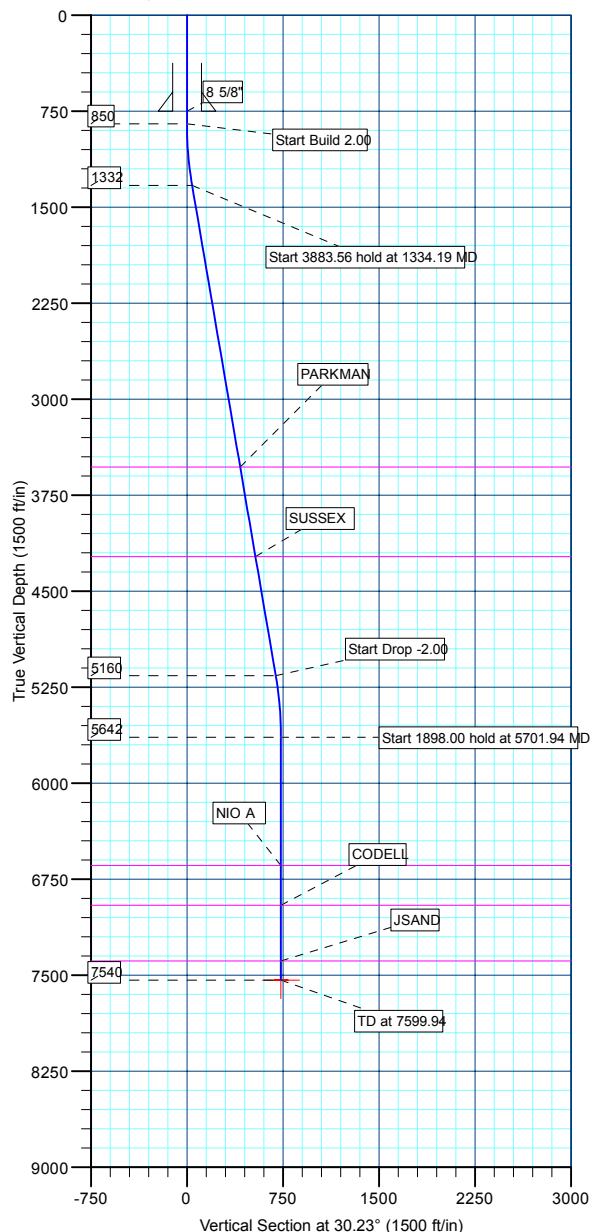
CASING DETAILS

TVD	MD	Name	Size
750.00	750.00	8 5/8"	8.62



KB ELEV:WELL @ 4657.00ft (Original Well Elev)

GRD ELEV: 4642.00



Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_GEIB 26-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site:	WELD_GEIB 1-26 PAD	North Reference:	True
Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_GEIB 26-26		
Design:	PLAN #1 1-19-10 RHS		

Project	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site						WELD_GEIB 1-26 PAD, SECTION 26 T5N R65W											
Site Position:						Northing:			1,380,869.48 ft			Latitude:			40° 22' 32.045 N		
From:			Lat/Long			Easting:			3,244,469.12 ft			Longitude:			104° 37' 21.101 W		
Position Uncertainty:			0.00 ft			Slot Radius:			in			Grid Convergence:			0.57 °		

Well	P_GEIB 26-26					
Well Position	+N/-S	0.00 ft	Northing:	1,380,869.48 ft	Latitude:	40° 22' 32.045 N
	+E/-W	0.00 ft	Easting:	3,244,469.12 ft	Longitude:	104° 37' 21.101 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	4,642.00 ft

Wellbore	P_GEIB 26-26				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/19/2010	8.98	67.10	53,284

Design	PLAN #1 1-19-10 RHS			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	30.23

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,334.19	9.68	30.23	1,331.89	35.27	20.55	2.00	2.00	0.00	30.23	
5,217.75	9.68	30.23	5,160.11	599.70	349.44	0.00	0.00	0.00	0.00	
5,701.94	0.00	0.00	5,642.00	634.97	369.99	2.00	-2.00	0.00	180.00	
7,599.94	0.00	0.00	7,540.00	634.97	369.99	0.00	0.00	0.00	0.00	PBHL_GEIB 26-26(

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_GEIB 26-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site:	WELD_GEIB 1-26 PAD	North Reference:	True
Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_GEIB 26-26		
Design:	PLAN #1 1-19-10 RHS		

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)	Turn Rate (°/100ft)
Start Build 2.00									
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	1.00	30.23	900.00	0.38	0.22	0.44	2.00	2.00	0.00
1,000.00	3.00	30.23	999.93	3.39	1.98	3.93	2.00	2.00	0.00
1,100.00	5.00	30.23	1,099.68	9.42	5.49	10.90	2.00	2.00	0.00
1,200.00	7.00	30.23	1,199.13	18.45	10.75	21.35	2.00	2.00	0.00
1,300.00	9.00	30.23	1,298.15	30.47	17.76	35.27	2.00	2.00	0.00
Start 3883.56 hold at 1334.19 MD									
1,334.19	9.68	30.23	1,331.89	35.27	20.55	40.82	2.00	2.00	0.00
1,400.00	9.68	30.23	1,396.76	44.83	26.12	51.89	0.00	0.00	0.00
1,500.00	9.68	30.23	1,495.34	59.37	34.59	68.71	0.00	0.00	0.00
1,600.00	9.68	30.23	1,593.91	73.90	43.06	85.53	0.00	0.00	0.00
1,700.00	9.68	30.23	1,692.49	88.44	51.53	102.35	0.00	0.00	0.00
1,800.00	9.68	30.23	1,791.06	102.97	60.00	119.17	0.00	0.00	0.00
1,900.00	9.68	30.23	1,889.64	117.50	68.47	136.00	0.00	0.00	0.00
2,000.00	9.68	30.23	1,988.21	132.04	76.94	152.82	0.00	0.00	0.00
2,100.00	9.68	30.23	2,086.79	146.57	85.40	169.64	0.00	0.00	0.00
2,200.00	9.68	30.23	2,185.36	161.11	93.87	186.46	0.00	0.00	0.00
2,300.00	9.68	30.23	2,283.94	175.64	102.34	203.28	0.00	0.00	0.00
2,400.00	9.68	30.23	2,382.51	190.17	110.81	220.10	0.00	0.00	0.00
2,500.00	9.68	30.23	2,481.09	204.71	119.28	236.92	0.00	0.00	0.00
2,600.00	9.68	30.23	2,579.66	219.24	127.75	253.74	0.00	0.00	0.00
2,700.00	9.68	30.23	2,678.24	233.77	136.22	270.56	0.00	0.00	0.00
2,800.00	9.68	30.23	2,776.81	248.31	144.68	287.39	0.00	0.00	0.00
2,900.00	9.68	30.23	2,875.39	262.84	153.15	304.21	0.00	0.00	0.00
3,000.00	9.68	30.23	2,973.96	277.38	161.62	321.03	0.00	0.00	0.00
3,100.00	9.68	30.23	3,072.54	291.91	170.09	337.85	0.00	0.00	0.00
3,200.00	9.68	30.23	3,171.11	306.44	178.56	354.67	0.00	0.00	0.00
3,300.00	9.68	30.23	3,269.69	320.98	187.03	371.49	0.00	0.00	0.00
3,400.00	9.68	30.23	3,368.26	335.51	195.50	388.31	0.00	0.00	0.00
3,500.00	9.68	30.23	3,466.84	350.05	203.97	405.13	0.00	0.00	0.00
PARKMAN									
3,564.08	9.68	30.23	3,530.00	359.36	209.39	415.91	0.00	0.00	0.00
3,600.00	9.68	30.23	3,565.41	364.58	212.43	421.96	0.00	0.00	0.00
3,700.00	9.68	30.23	3,663.99	379.11	220.90	438.78	0.00	0.00	0.00
3,800.00	9.68	30.23	3,762.56	393.65	229.37	455.60	0.00	0.00	0.00
3,900.00	9.68	30.23	3,861.14	408.18	237.84	472.42	0.00	0.00	0.00
4,000.00	9.68	30.23	3,959.71	422.71	246.31	489.24	0.00	0.00	0.00
4,100.00	9.68	30.23	4,058.29	437.25	254.78	506.06	0.00	0.00	0.00
4,200.00	9.68	30.23	4,156.86	451.78	263.25	522.88	0.00	0.00	0.00
SUSSEX									
4,274.19	9.68	30.23	4,230.00	462.57	269.53	535.36	0.00	0.00	0.00
4,300.00	9.68	30.23	4,255.44	466.32	271.71	539.70	0.00	0.00	0.00
4,400.00	9.68	30.23	4,354.01	480.85	280.18	556.52	0.00	0.00	0.00
4,500.00	9.68	30.23	4,452.59	495.38	288.65	573.35	0.00	0.00	0.00
4,600.00	9.68	30.23	4,551.16	509.92	297.12	590.17	0.00	0.00	0.00
4,700.00	9.68	30.23	4,649.74	524.45	305.59	606.99	0.00	0.00	0.00
4,800.00	9.68	30.23	4,748.31	538.99	314.06	623.81	0.00	0.00	0.00
4,900.00	9.68	30.23	4,846.89	553.52	322.53	640.63	0.00	0.00	0.00
5,000.00	9.68	30.23	4,945.46	568.05	330.99	657.45	0.00	0.00	0.00
5,100.00	9.68	30.23	5,044.04	582.59	339.46	674.27	0.00	0.00	0.00
5,200.00	9.68	30.23	5,142.61	597.12	347.93	691.09	0.00	0.00	0.00
Start Drop -2.00									
5,217.75	9.68	30.23	5,160.11	599.70	349.44	694.08	0.00	0.00	0.00

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_GEIB 26-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site:	WELD_GEIB 1-26 PAD	North Reference:	True
Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_GEIB 26-26		
Design:	PLAN #1 1-19-10 RHS		

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)	Turn Rate (°/100ft)	
5,300.00	8.04	30.23	5,241.38	610.65	355.81	706.75	2.00	-2.00	0.00	
5,400.00	6.04	30.23	5,340.62	621.23	361.98	719.00	2.00	-2.00	0.00	
5,500.00	4.04	30.23	5,440.23	628.82	366.40	727.78	2.00	-2.00	0.00	
5,600.00	2.04	30.23	5,540.08	633.40	369.07	733.09	2.00	-2.00	0.00	
5,700.00	0.04	30.23	5,640.06	634.97	369.99	734.90	2.00	-2.00	0.00	
Start 1898.00 hold at 5701.94 MD										
5,701.94	0.00	0.00	5,642.00	634.97	369.99	734.90	2.00	-2.00	0.00	
5,800.00	0.00	0.00	5,740.06	634.97	369.99	734.90	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,840.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,940.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,040.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,140.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,240.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,340.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,500.00	0.00	0.00	6,440.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,540.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,640.06	634.97	369.99	734.90	0.00	0.00	0.00	
NIO A										
6,701.94	0.00	0.00	6,642.00	634.97	369.99	734.90	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,740.06	634.97	369.99	734.90	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,840.06	634.97	369.99	734.90	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,940.06	634.97	369.99	734.90	0.00	0.00	0.00	
CODELL										
7,013.94	0.00	0.00	6,954.00	634.97	369.99	734.90	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,040.06	634.97	369.99	734.90	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,140.06	634.97	369.99	734.90	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,240.06	634.97	369.99	734.90	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,340.06	634.97	369.99	734.90	0.00	0.00	0.00	
JSAND										
7,449.94	0.00	0.00	7,390.00	634.97	369.99	734.90	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,440.06	634.97	369.99	734.90	0.00	0.00	0.00	
PBHL_GEIB 26-26(50 FNL 50 FEL)50' TGT RAD										
7,599.94	0.00	0.00	7,540.00	634.97	369.99	734.90	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
PBHL_GEIB 26-26(50 - hit/miss target - Shape - plan hits target center - Circle (radius 50.00)	0.00	0.00	7,540.00	634.97	369.99	1,381,508.08	3,244,832.81	40° 22' 38.320 N	104° 37' 16.320 W	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
750.00	750.00	8 5/8"	8.62	11.00	

Database:	EDM 2003.21 Single User Db	Local Co-ordinate Reference:	Well P_GEIB 26-26
Company:	US ROCKIES REGION PLANNING	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site:	WELD_GEIB 1-26 PAD	North Reference:	True
Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	P_GEIB 26-26		
Design:	PLAN #1 1-19-10 RHS		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,564.08	3,530.00	PARKMAN				
4,274.19	4,230.00	SUSSEX				
6,701.94	6,642.00	NIO A				
7,013.94	6,954.00	CODELL				
7,449.94	7,390.00	JSAND				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
850.00	850.00	0.00	0.00	Start Build 2.00	
1,334.19	1,331.89	35.27	20.55	Start 3883.56 hold at 1334.19 MD	
5,217.75	5,160.11	599.70	349.44	Start Drop -2.00	
5,701.94	5,642.00	634.97	369.99	Start 1898.00 hold at 5701.94 MD	
7,599.94	7,540.00	634.97	369.99	TD at 7599.94	



US ROCKIES REGION PLANNING

**COLORADO NORTHERN ZONE - 83
WELD_GEIB 1-26 PAD
P_GEIB 26-26**

**P_GEIB 26-26
PLAN #1 1-19-10 RHS**

Anticollision Report

19 January, 2010



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_GEIB 26-26
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Reference Site:	WELD_GEIB 1-26 PAD	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_GEIB 26-26	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-19-10 RHS	Offset TVD Reference:	Offset Datum

Reference	PLAN #1 1-19-10 RHS		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	0.00 to 20,000.00ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	1/19/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	7,599.94	PLAN #1 1-19-10 RHS (P_GEIB 26-26)	MWD	MWD - Standard

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						
WELD_GEIB 1-26 PAD						
P_GEIB 41-26 - P_GEIB 41-26 - PLAN #1 1-19-10 RHS	850.00	850.00	15.68	12.12	4.402	CC, ES
P_GEIB 41-26 - P_GEIB 41-26 - PLAN #1 1-19-10 RHS	900.00	899.73	16.47	12.70	4.367	SF
VETTING #1-26 EXISTING - VETTING #1-26 EXISTING	850.00	850.00	48.12	14.64	1.437	Level 3, CC
VETTING #1-26 EXISTING - VETTING #1-26 EXISTING	1,100.00	1,099.68	53.65	9.68	1.220	Level 2, ES, SF

Offset Design												WELD_GEIB 1-26 PAD - P_GEIB 41-26 - P_GEIB 41-26 - PLAN #1 1-19-10 RHS		Offset Site Error:		0.00 ft
Survey Program: 0-MWD														Offset Well Error:		0.00 ft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
0.00	0.00	0.00	0.00	0.00	0.00	180.00	-15.68	0.00	15.68							
100.00	100.00	100.00	100.00	0.10	0.10	180.00	-15.68	0.00	15.68	15.49	0.19	82.078				
200.00	200.00	200.00	200.00	0.32	0.32	180.00	-15.68	0.00	15.68	15.04	0.64	24.479				
300.00	300.00	300.00	300.00	0.55	0.55	180.00	-15.68	0.00	15.68	14.59	1.09	14.385				
400.00	400.00	400.00	400.00	0.77	0.77	180.00	-15.68	0.00	15.68	14.14	1.54	10.185				
500.00	500.00	500.00	500.00	0.99	0.99	180.00	-15.68	0.00	15.68	13.69	1.99	7.883				
600.00	600.00	600.00	600.00	1.22	1.22	180.00	-15.68	0.00	15.68	13.24	2.44	6.430				
700.00	700.00	700.00	700.00	1.44	1.44	180.00	-15.68	0.00	15.68	12.79	2.89	5.429				
800.00	800.00	800.00	800.00	1.67	1.67	180.00	-15.68	0.00	15.68	12.34	3.34	4.698				
850.00	850.00	850.00	850.00	1.78	1.78	180.00	-15.68	0.00	15.68	12.12	3.56	4.402	CC, ES			
900.00	900.00	899.73	899.73	1.89	1.88	150.06	-16.09	0.13	16.47	12.70	3.77	4.367	SF			
1,000.00	999.93	998.88	998.82	2.11	2.05	151.66	-19.36	1.18	22.80	18.63	4.16	5.475				
1,100.00	1,099.68	1,097.15	1,096.84	2.34	2.24	153.11	-25.82	3.26	35.43	30.86	4.56	7.766				
1,200.00	1,199.13	1,193.95	1,193.12	2.58	2.45	153.98	-35.31	6.32	54.28	49.31	4.96	10.933				
1,300.00	1,298.15	1,288.75	1,287.03	2.84	2.68	154.42	-47.60	10.27	79.22	73.84	5.37	14.742				
1,334.19	1,331.89	1,320.61	1,318.50	2.94	2.76	154.51	-52.40	11.81	89.11	83.60	5.51	16.159				
1,400.00	1,396.76	1,382.39	1,379.36	3.13	2.94	154.68	-62.46	15.05	109.26	103.45	5.81	18.809				
1,500.00	1,495.34	1,477.52	1,473.05	3.44	3.23	154.80	-78.17	20.11	140.09	133.81	6.27	22.339				
1,600.00	1,593.91	1,572.65	1,566.74	3.76	3.54	154.88	-93.88	25.17	170.91	164.17	6.74	25.342				
1,700.00	1,692.49	1,667.78	1,660.42	4.09	3.86	154.94	-109.60	30.22	201.74	194.51	7.23	27.915				
1,800.00	1,791.06	1,762.91	1,754.11	4.44	4.20	154.98	-125.31	35.28	232.57	224.85	7.72	30.136				
1,900.00	1,889.64	1,858.04	1,847.80	4.78	4.54	155.01	-141.02	40.33	263.39	255.18	8.21	32.066				
2,000.00	1,988.21	1,953.17	1,941.49	5.14	4.89	155.04	-156.73	45.39	294.22	285.50	8.72	33.756				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_GEIB 26-26
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Reference Site:	WELD_GEIB 1-26 PAD	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_GEIB 26-26	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-19-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_GEIB 1-26 PAD - P_GEIB 41-26 - P_GEIB 41-26 - PLAN #1 1-19-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWMD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
2,100.00	2,086.79	2,048.30	2,035.17	5.49	5.24	155.06	-172.44	50.44	325.05	315.83	9.22	35.246	
2,200.00	2,185.36	2,143.43	2,128.86	5.85	5.60	155.07	-188.15	55.50	355.88	346.14	9.73	36.566	
2,300.00	2,283.94	2,238.56	2,222.55	6.21	5.96	155.09	-203.87	60.56	386.70	376.46	10.25	37.744	
2,400.00	2,382.51	2,333.69	2,316.23	6.58	6.32	155.10	-219.58	65.61	417.53	406.77	10.76	38.799	
2,500.00	2,481.09	2,428.82	2,409.92	6.95	6.69	155.11	-235.29	70.67	448.36	437.08	11.28	39.750	
2,600.00	2,579.66	2,523.95	2,503.61	7.31	7.06	155.12	-251.00	75.72	479.18	467.39	11.80	40.610	
2,700.00	2,678.24	2,619.08	2,597.29	7.68	7.43	155.13	-266.71	80.78	510.01	497.69	12.32	41.391	
2,800.00	2,776.81	2,714.21	2,690.98	8.05	7.80	155.13	-282.42	85.84	540.84	527.99	12.85	42.104	
2,900.00	2,875.39	2,809.34	2,784.67	8.43	8.17	155.14	-298.14	90.89	571.67	558.30	13.37	42.757	
3,000.00	2,973.96	2,904.47	2,878.36	8.80	8.54	155.15	-313.85	95.95	602.49	588.60	13.90	43.357	
3,100.00	3,072.54	2,999.60	2,972.04	9.17	8.92	155.15	-329.56	101.00	633.32	618.90	14.42	43.909	
3,200.00	3,171.11	3,094.72	3,065.73	9.55	9.29	155.15	-345.27	106.06	664.15	649.20	14.95	44.420	
3,300.00	3,269.69	3,189.85	3,159.42	9.92	9.67	155.16	-360.98	111.12	694.98	679.50	15.48	44.893	
3,400.00	3,368.26	3,284.98	3,253.10	10.30	10.05	155.16	-376.69	116.17	725.80	709.79	16.01	45.333	
3,500.00	3,466.84	3,380.11	3,346.79	10.68	10.43	155.17	-392.41	121.23	756.63	740.09	16.54	45.743	
3,600.00	3,565.41	3,475.24	3,440.48	11.05	10.80	155.17	-408.12	126.28	787.46	770.39	17.07	46.126	
3,700.00	3,663.99	3,570.37	3,534.16	11.43	11.18	155.17	-423.83	131.34	818.29	800.68	17.60	46.484	
3,800.00	3,762.56	3,665.50	3,627.85	11.81	11.56	155.17	-439.54	136.40	849.11	830.98	18.14	46.819	
3,900.00	3,861.14	3,760.63	3,721.54	12.18	11.94	155.18	-455.25	141.45	879.94	861.27	18.67	47.134	
4,000.00	3,959.71	3,855.76	3,815.22	12.56	12.32	155.18	-470.97	146.51	910.77	891.57	19.20	47.431	
4,100.00	4,058.29	3,950.89	3,908.91	12.94	12.70	155.18	-486.68	151.56	941.60	921.86	19.74	47.711	
4,200.00	4,156.86	4,046.02	4,002.60	13.32	13.08	155.18	-502.39	156.62	972.42	952.15	20.27	47.975	
4,300.00	4,255.44	4,141.15	4,096.29	13.70	13.46	155.19	-518.10	161.67	1,003.25	982.45	20.80	48.224	
4,400.00	4,354.01	4,236.28	4,189.97	14.08	13.84	155.19	-533.81	166.73	1,034.08	1,012.74	21.34	48.461	
4,500.00	4,452.59	4,331.41	4,283.66	14.46	14.23	155.19	-549.52	171.79	1,064.91	1,043.03	21.87	48.685	
4,600.00	4,551.16	4,426.54	4,377.35	14.84	14.61	155.19	-565.24	176.84	1,095.73	1,073.33	22.41	48.898	
4,700.00	4,649.74	4,521.67	4,471.03	15.22	14.99	155.19	-580.95	181.90	1,126.56	1,103.62	22.94	49.100	
4,800.00	4,748.31	4,616.80	4,564.72	15.60	15.37	155.19	-596.66	186.95	1,157.39	1,133.91	23.48	49.293	
4,900.00	4,846.89	4,711.93	4,658.41	15.98	15.75	155.20	-612.37	192.01	1,188.22	1,164.20	24.02	49.477	
5,000.00	4,945.46	4,807.06	4,752.09	16.36	16.13	155.20	-628.08	197.07	1,219.04	1,194.49	24.55	49.652	
5,100.00	5,044.04	4,902.19	4,845.78	16.74	16.52	155.20	-643.79	202.12	1,249.87	1,224.78	25.09	49.819	
5,200.00	5,142.61	4,997.32	4,939.47	17.12	16.90	155.20	-659.51	207.18	1,280.70	1,255.07	25.62	49.979	
5,217.75	5,160.11	5,014.20	4,956.10	17.18	16.97	155.20	-662.29	208.08	1,286.17	1,260.45	25.72	50.007	
5,300.00	5,241.38	5,092.77	5,033.47	17.45	17.28	155.39	-675.27	212.25	1,310.50	1,284.28	26.22	49.972	
5,400.00	5,340.62	5,189.08	5,128.32	17.70	17.67	155.54	-691.18	217.37	1,337.31	1,310.54	26.78	49.942	
5,500.00	5,440.23	5,328.35	5,265.75	17.92	18.14	155.55	-712.64	224.28	1,360.21	1,332.83	27.37	49.690	
5,600.00	5,540.08	5,504.10	5,440.40	18.10	18.54	155.51	-730.97	230.18	1,375.05	1,347.10	27.94	49.209	
5,701.94	5,642.00	5,686.12	5,622.20	18.24	18.83	-174.30	-739.19	232.82	1,381.13	1,352.69	28.44	48.563	
5,800.00	5,740.06	5,803.99	5,740.06	18.38	18.99	-174.31	-739.52	232.93	1,381.31	1,352.50	28.81	47.947	
5,900.00	5,840.06	5,903.99	5,840.06	18.52	19.10	-174.31	-739.52	232.93	1,381.31	1,352.14	29.16	47.367	
6,000.00	5,940.06	6,003.99	5,940.06	18.67	19.22	-174.31	-739.52	232.93	1,381.31	1,351.79	29.52	46.798	
6,100.00	6,040.06	6,103.99	6,040.06	18.82	19.35	-174.31	-739.52	232.93	1,381.31	1,351.43	29.87	46.237	
6,200.00	6,140.06	6,203.99	6,140.06	18.98	19.47	-174.31	-739.52	232.93	1,381.31	1,351.07	30.23	45.687	
6,300.00	6,240.06	6,303.99	6,240.06	19.13	19.60	-174.31	-739.52	232.93	1,381.31	1,350.71	30.60	45.146	
6,400.00	6,340.06	6,403.99	6,340.06	19.29	19.72	-174.31	-739.52	232.93	1,381.31	1,350.34	30.96	44.614	
6,500.00	6,440.06	6,503.99	6,440.06	19.44	19.85	-174.31	-739.52	232.93	1,381.31	1,349.98	31.33	44.092	
6,600.00	6,540.06	6,603.99	6,540.06	19.60	19.98	-174.31	-739.52	232.93	1,381.31	1,349.61	31.70	43.578	
6,700.00	6,640.06	6,703.99	6,640.06	19.76	20.11	-174.31	-739.52	232.93	1,381.31	1,349.24	32.07	43.074	
6,800.00	6,740.06	6,803.99	6,740.06	19.92	20.25	-174.31	-739.52	232.93	1,381.31	1,348.87	32.44	42.579	
6,900.00	6,840.06	6,903.99	6,840.06	20.08	20.38	-174.31	-739.52	232.93	1,381.31	1,348.49	32.82	42.093	
7,000.00	6,940.06	7,003.99	6,940.06	20.25	20.52	-174.31	-739.52	232.93	1,381.31	1,348.11	33.19	41.615	
7,100.00	7,040.06	7,103.99	7,040.06	20.41	20.66	-174.31	-739.52	232.93	1,381.31	1,347.73	33.57	41.146	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_GEIB 26-26
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Reference Site:	WELD_GEIB 1-26 PAD	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_GEIB 26-26	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-19-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design WELD_GEIB 1-26 PAD - P_GEIB 41-26 - P_GEIB 41-26 - PLAN #1 1-19-10 RHS												Offset Site Error:	0.00 ft
Survey Program: 0-MWD												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	
7,200.00	7,140.06	7,203.99	7,140.06	20.58	20.80	-174.31	-739.52	232.93	1,381.31	1,347.35	33.95	40.685	
7,300.00	7,240.06	7,303.99	7,240.06	20.74	20.94	-174.31	-739.52	232.93	1,381.31	1,346.97	34.33	40.232	
7,400.00	7,340.06	7,403.99	7,340.06	20.91	21.08	-174.31	-739.52	232.93	1,381.31	1,346.59	34.72	39.788	
7,500.00	7,440.06	7,503.99	7,440.06	21.08	21.23	-174.31	-739.52	232.93	1,381.31	1,346.20	35.10	39.351	
7,599.94	7,540.00	7,603.93	7,540.00	21.25	21.37	-174.31	-739.52	232.93	1,381.31	1,345.82	35.49	38.923	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_GEIB 26-26
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Reference Site:	WELD_GEIB 1-26 PAD	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_GEIB 26-26	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-19-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												WELD_GEIB 1-26 PAD - VETTING #1-26 EXISTING - VETTING #1-26 EXISTING - VETTING #1-26 EX		Offset Site Error: 0.00 ft	
Survey Program: 0-UNKNOWN												Offset Well Error: 0.00 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)	Minimum Separation (ft)	Separation Factor			
0.00	0.00	0.00	0.00	0.00	0.00	-84.81	4.36	-47.92	48.12						
100.00	100.00	100.00	100.00	0.10	1.70	-84.81	4.36	-47.92	48.12	46.32	1.80	26.799			
200.00	200.00	200.00	200.00	0.32	5.70	-84.81	4.36	-47.92	48.12	42.10	6.02	7.993			
300.00	300.00	300.00	300.00	0.55	9.70	-84.81	4.36	-47.92	48.12	37.87	10.25	4.697			
400.00	400.00	400.00	400.00	0.77	13.70	-84.81	4.36	-47.92	48.12	33.65	14.47	3.325			
500.00	500.00	500.00	500.00	0.99	17.70	-84.81	4.36	-47.92	48.12	29.42	18.69	2.574			
600.00	600.00	600.00	600.00	1.22	21.70	-84.81	4.36	-47.92	48.12	25.20	22.92	2.099			
700.00	700.00	700.00	700.00	1.44	25.70	-84.81	4.36	-47.92	48.12	20.97	27.14	1.773			
800.00	800.00	800.00	800.00	1.67	29.70	-84.81	4.36	-47.92	48.12	16.75	31.37	1.534			
850.00	850.00	850.00	850.00	1.78	31.70	-84.81	4.36	-47.92	48.12	14.64	33.48	1.437 Level 3, CC			
900.00	900.00	900.00	900.00	1.89	33.70	-115.50	4.36	-47.92	48.30	12.71	35.59	1.357 Level 3			
1,000.00	999.93	999.93	999.93	2.11	37.70	-119.09	4.36	-47.92	49.91	10.11	39.80	1.254 Level 3			
1,100.00	1,099.68	1,099.68	1,099.68	2.34	41.69	-125.54	4.36	-47.92	53.65	9.68	43.97	1.220 Level 2, ES, SF			
1,200.00	1,199.13	1,199.13	1,199.13	2.58	45.67	-133.52	4.36	-47.92	60.34	12.27	48.07	1.255 Level 3			
1,300.00	1,298.15	1,298.15	1,298.15	2.84	49.63	-141.57	4.36	-47.92	70.68	18.63	52.05	1.358 Level 3			
1,334.19	1,331.89	1,331.89	1,331.89	2.94	50.98	-144.14	4.36	-47.92	75.13	21.75	53.38	1.407 Level 3			
1,400.00	1,396.76	1,396.76	1,396.76	3.13	53.57	-148.53	4.36	-47.92	84.39	28.33	56.05	1.505			
1,500.00	1,495.34	1,495.34	1,495.34	3.44	57.51	-153.59	4.36	-47.92	99.17	39.04	60.13	1.649			
1,600.00	1,593.91	1,593.91	1,593.91	3.76	61.46	-157.33	4.36	-47.92	114.52	50.29	64.23	1.783			
1,700.00	1,692.49	1,692.49	1,692.49	4.09	65.40	-160.18	4.36	-47.92	130.23	61.90	68.33	1.906			
1,800.00	1,791.06	1,791.06	1,791.06	4.44	69.34	-162.41	4.36	-47.92	146.19	73.75	72.44	2.018			
1,900.00	1,889.64	1,889.64	1,889.64	4.78	73.29	-164.21	4.36	-47.92	162.32	85.76	76.56	2.120			
2,000.00	1,988.21	1,988.21	1,988.21	5.14	77.23	-165.67	4.36	-47.92	178.58	97.90	80.68	2.213			
2,100.00	2,086.79	2,086.79	2,086.79	5.49	81.17	-166.90	4.36	-47.92	194.94	110.13	84.81	2.299			
2,200.00	2,185.36	2,185.36	2,185.36	5.85	85.11	-167.93	4.36	-47.92	211.37	122.44	88.93	2.377			
2,300.00	2,283.94	2,283.94	2,283.94	6.21	89.06	-168.81	4.36	-47.92	227.85	134.79	93.06	2.448			
2,400.00	2,382.51	2,382.51	2,382.51	6.58	93.00	-169.58	4.36	-47.92	244.38	147.20	97.19	2.515			
2,500.00	2,481.09	2,481.09	2,481.09	6.95	96.94	-170.25	4.36	-47.92	260.95	159.63	101.32	2.576			
2,600.00	2,579.66	2,579.66	2,579.66	7.31	100.89	-170.83	4.36	-47.92	277.55	172.10	105.45	2.632			
2,700.00	2,678.24	2,678.24	2,678.24	7.68	104.83	-171.36	4.36	-47.92	294.18	184.59	109.58	2.684			
2,800.00	2,776.81	2,776.81	2,776.81	8.05	108.77	-171.82	4.36	-47.92	310.82	197.10	113.72	2.733			
2,900.00	2,875.39	2,875.39	2,875.39	8.43	112.72	-172.24	4.36	-47.92	327.49	209.63	117.85	2.779			
3,000.00	2,973.96	2,973.96	2,973.96	8.80	116.66	-172.62	4.36	-47.92	344.16	222.18	121.99	2.821			
3,100.00	3,072.54	3,072.54	3,072.54	9.17	120.60	-172.96	4.36	-47.92	360.86	234.73	126.12	2.861			
3,200.00	3,171.11	3,171.11	3,171.11	9.55	124.54	-173.27	4.36	-47.92	377.56	247.30	130.26	2.899			
3,300.00	3,269.69	3,269.69	3,269.69	9.92	128.49	-173.56	4.36	-47.92	394.27	259.88	134.39	2.934			
3,400.00	3,368.26	3,368.26	3,368.26	10.30	132.43	-173.82	4.36	-47.92	410.99	272.46	138.53	2.967			
3,500.00	3,466.84	3,466.84	3,466.84	10.68	136.37	-174.07	4.36	-47.92	427.72	285.06	142.67	2.998			
3,600.00	3,565.41	3,565.41	3,565.41	11.05	140.32	-174.29	4.36	-47.92	444.46	297.66	146.81	3.028			
3,700.00	3,663.99	3,663.99	3,663.99	11.43	144.26	-174.50	4.36	-47.92	461.20	310.26	150.94	3.055			
3,800.00	3,762.56	3,762.56	3,762.56	11.81	148.20	-174.69	4.36	-47.92	477.95	322.87	155.08	3.082			
3,900.00	3,861.14	3,861.14	3,861.14	12.18	152.15	-174.87	4.36	-47.92	494.71	335.49	159.22	3.107			
4,000.00	3,959.71	3,959.71	3,959.71	12.56	156.09	-175.04	4.36	-47.92	511.46	348.11	163.36	3.131			
4,100.00	4,058.29	4,058.29	4,058.29	12.94	160.03	-175.20	4.36	-47.92	528.23	360.73	167.50	3.154			
4,200.00	4,156.86	4,156.86	4,156.86	13.32	163.97	-175.35	4.36	-47.92	544.99	373.36	171.63	3.175			
4,300.00	4,255.44	4,255.44	4,255.44	13.70	167.92	-175.48	4.36	-47.92	561.76	385.99	175.77	3.196			
4,400.00	4,354.01	4,354.01	4,354.01	14.08	171.86	-175.62	4.36	-47.92	578.53	398.62	179.91	3.216			
4,500.00	4,452.59	4,452.59	4,452.59	14.46	175.80	-175.74	4.36	-47.92	595.31	411.26	184.05	3.234			
4,600.00	4,551.16	4,551.16	4,551.16	14.84	179.75	-175.86	4.36	-47.92	612.08	423.89	188.19	3.252			
4,700.00	4,649.74	4,649.74	4,649.74	15.22	183.69	-175.97	4.36	-47.92	628.86	436.54	192.33	3.270			
4,800.00	4,748.31	4,748.31	4,748.31	15.60	187.63	-176.07	4.36	-47.92	645.65	449.18	196.47	3.286			
4,900.00	4,846.89	4,846.89	4,846.89	15.98	191.58	-176.17	4.36	-47.92	662.43	461.82	200.61	3.302			

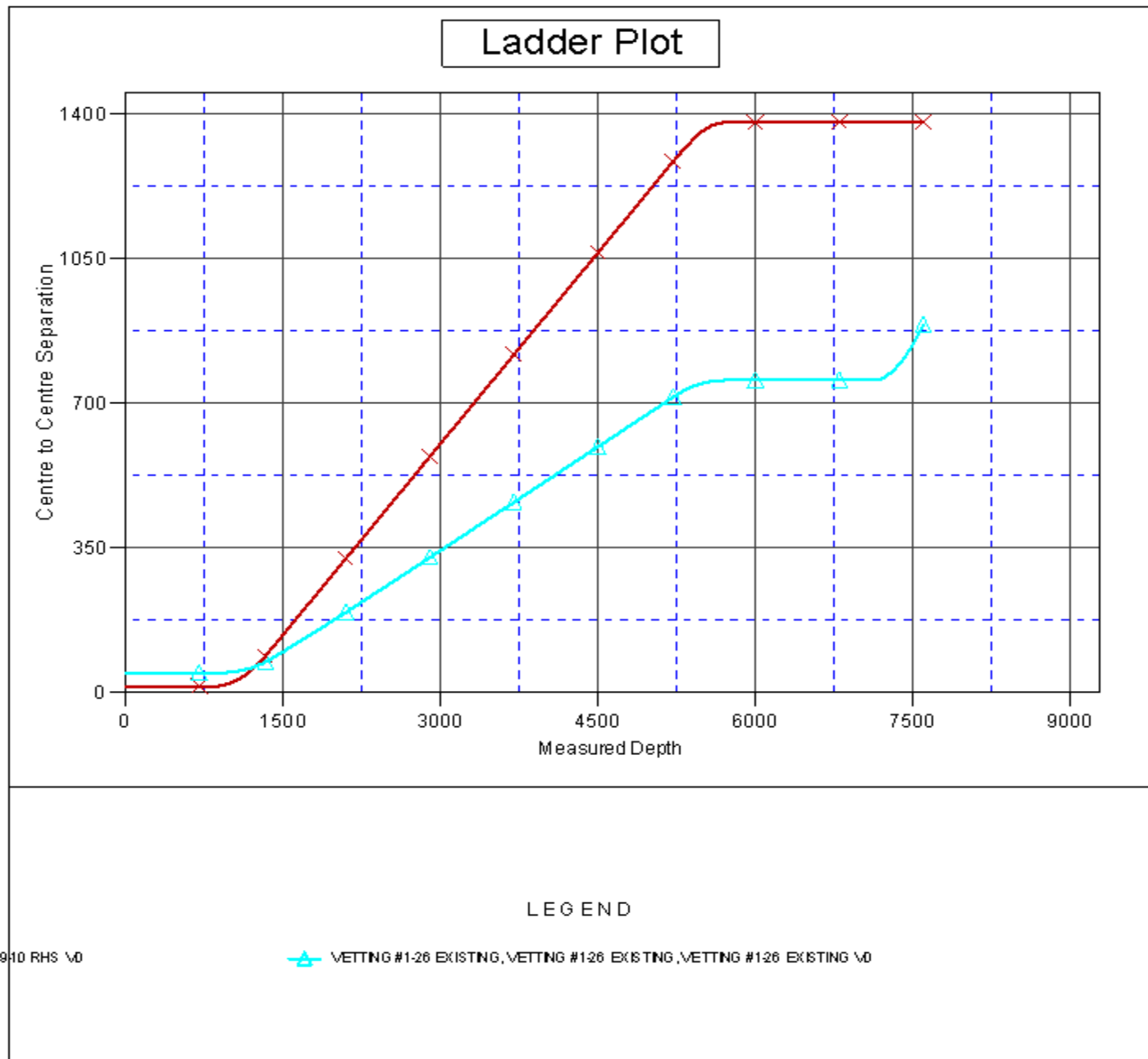
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_GEIB 26-26
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Reference Site:	WELD_GEIB 1-26 PAD	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_GEIB 26-26	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-19-10 RHS	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 ft
Survey Program: 0-UNKNOWN												Offset Well Error:	0.00 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)	Minimum Separation (ft)	Separation Factor	Warning
5,000.00	4,945.46	4,945.46	4,945.46	16.36	195.52	-176.27	4.36	-47.92	679.21	474.47	204.75	3.317	
5,100.00	5,044.04	5,044.04	5,044.04	16.74	199.46	-176.36	4.36	-47.92	696.00	487.12	208.89	3.332	
5,200.00	5,142.61	5,142.61	5,142.61	17.12	203.40	-176.44	4.36	-47.92	712.79	499.76	213.03	3.346	
5,217.75	5,160.11	5,160.11	5,160.11	17.18	204.10	-176.46	4.36	-47.92	715.77	502.01	213.76	3.348	
5,300.00	5,241.38	5,241.38	5,241.38	17.45	207.36	-176.53	4.36	-47.92	728.42	510.36	218.05	3.341	
5,400.00	5,340.62	5,340.62	5,340.62	17.70	211.32	-176.61	4.36	-47.92	740.65	517.58	223.07	3.320	
5,500.00	5,440.23	5,440.23	5,440.23	17.92	215.31	-176.66	4.36	-47.92	749.42	521.57	227.85	3.289	
5,600.00	5,540.08	5,540.08	5,540.08	18.10	219.30	-176.69	4.36	-47.92	754.71	522.34	232.37	3.248	
5,701.94	5,642.00	5,642.00	5,642.00	18.24	223.38	-146.47	4.36	-47.92	756.52	519.82	236.70	3.196	
5,800.00	5,740.06	5,740.06	5,740.06	18.38	227.30	-146.47	4.36	-47.92	756.52	515.72	240.80	3.142	
5,900.00	5,840.06	5,840.06	5,840.06	18.52	231.30	-146.47	4.36	-47.92	756.52	511.52	245.00	3.088	
6,000.00	5,940.06	5,940.06	5,940.06	18.67	235.30	-146.47	4.36	-47.92	756.52	507.31	249.21	3.036	
6,100.00	6,040.06	6,040.06	6,040.06	18.82	239.30	-146.47	4.36	-47.92	756.52	503.11	253.41	2.985	
6,200.00	6,140.06	6,140.06	6,140.06	18.98	243.30	-146.47	4.36	-47.92	756.52	498.90	257.62	2.937	
6,300.00	6,240.06	6,240.06	6,240.06	19.13	247.30	-146.47	4.36	-47.92	756.52	494.70	261.82	2.889	
6,400.00	6,340.06	6,340.06	6,340.06	19.29	251.30	-146.47	4.36	-47.92	756.52	490.49	266.03	2.844	
6,500.00	6,440.06	6,440.06	6,440.06	19.44	255.30	-146.47	4.36	-47.92	756.52	486.28	270.24	2.799	
6,600.00	6,540.06	6,540.06	6,540.06	19.60	259.30	-146.47	4.36	-47.92	756.52	482.08	274.44	2.757	
6,700.00	6,640.06	6,640.06	6,640.06	19.76	263.30	-146.47	4.36	-47.92	756.52	477.87	278.65	2.715	
6,800.00	6,740.06	6,740.06	6,740.06	19.92	267.30	-146.47	4.36	-47.92	756.52	473.66	282.86	2.675	
6,900.00	6,840.06	6,840.06	6,840.06	20.08	271.30	-146.47	4.36	-47.92	756.52	469.45	287.07	2.635	
7,000.00	6,940.06	6,940.06	6,940.06	20.25	275.30	-146.47	4.36	-47.92	756.52	465.24	291.28	2.597	
7,100.00	7,040.06	7,040.06	7,040.06	20.41	279.30	-146.47	4.36	-47.92	756.52	461.03	295.49	2.560	
7,200.00	7,140.06	7,070.00	7,070.00	20.58	280.50	-146.47	4.36	-47.92	759.76	462.86	296.89	2.559	
7,300.00	7,240.06	7,070.00	7,070.00	20.74	280.50	-146.47	4.36	-47.92	775.40	478.30	297.10	2.610	
7,400.00	7,340.06	7,070.00	7,070.00	20.91	280.50	-146.47	4.36	-47.92	803.28	505.96	297.31	2.702	
7,500.00	7,440.06	7,070.00	7,070.00	21.08	280.50	-146.47	4.36	-47.92	842.18	544.65	297.52	2.831	
7,599.94	7,540.00	7,070.00	7,070.00	21.25	280.50	-146.47	4.36	-47.92	890.63	592.89	297.74	2.991	

Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_GEIB 26-26
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Reference Site:	WELD_GEIB 1-26 PAD	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00ft	Output errors are at	2.00 sigma
Reference Wellbore	P_GEIB 26-26	Database:	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 1-19-10 RHS	Offset TVD Reference:	Offset Datum

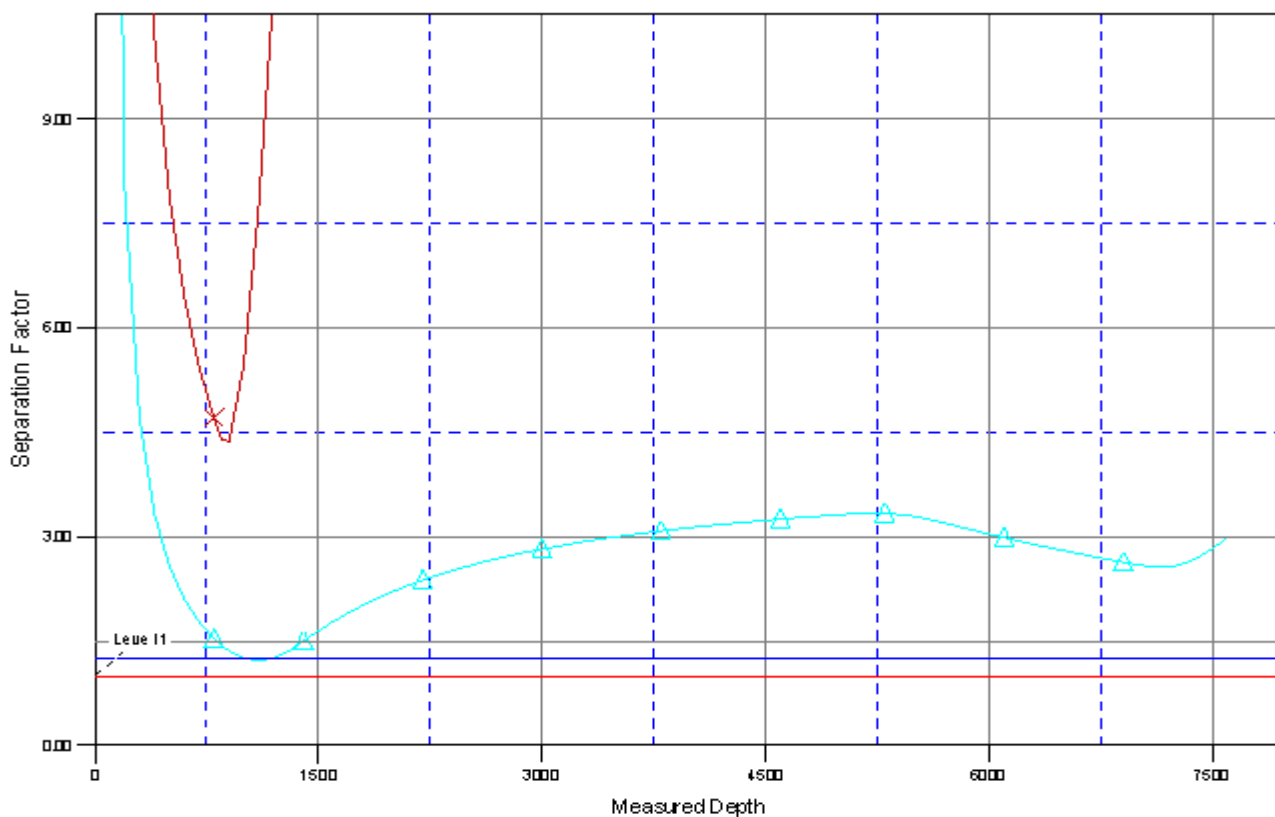
Reference Depths are relative to WELL @ 4657.00ft (Original Well Elev) Coordinates are relative to: P_GEIB 26-26
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.57°



Company:	US ROCKIES REGION PLANNING	Local Co-ordinate Reference:	Well P_GEIB 26-26
Project:	COLORADO NORTHERN ZONE - 83	TVD Reference:	WELL @ 4657.00ft (Original Well Elev)
Reference Site:	WELD_GEIB 1-26 PAD	MD Reference:	WELL @ 4657.00ft (Original Well Elev)
Site Error:	0.00ft	North Reference:	True
Reference Well:	P_GEIB 26-26	Survey Calculation Method:	Minimum Curvature
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Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.57°

Separation Factor Plot



LEGEND

1910 RHS WD

 VETTING #126 EXISTING, VETTING #126 EXISTING, VETTING #126 EXISTING WD