



Centennial Resource Development, Inc.

**Lea Co., NM (NAD83)
Cheddar 2BS Federal Com
1H**

OH

Plan: Plan #1

Standard Planning Report

12 July, 2018





Project: Lea Co., NM (NAD83)
Site: Cheddar 285 Federal Com
Well: 1H
Wellbore: OH
Design: Plan #1
Lat: 32.414594
Long: -103.704053
GL: 3665.00
KB: KB=25' @ 3690.00usf (H&P 650)



WELL DETAILS: 1H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	515132.01	735525.70	32.414594	-103.704053

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape Point
Cheddar 285 Fed Com 1H PBHL	10559.54	10004.24	-89.38	525135.55	735377.42	Point
Cheddar 285 Fed Com 1H FTP	10577.00	-124.12	-79.88	515007.42	735446.55	Point

SECTION DETAILS

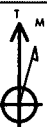
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6095.00	0.00	0.00	6095.00	0.00	0.00	0.00	0.00	0.00	Build 1"/100'
6694.89	6.00	212.76	6693.79	-26.38	-16.98	1.00	212.76	-26.23	912' Hold
7606.89	6.00	212.76	7600.80	-106.53	-68.56	0.00	0.00	-105.92	Drop 1.5"/100'
8006.82	0.00	0.00	8000.00	-124.12	-79.88	1.50	180.00	-123.40	2003' Hold
10010.08	0.00	0.00	10003.26	-124.12	-79.88	0.00	0.00	-123.40	Build 10"/100'
10911.08	90.10	359.95	10576.22	449.84	-80.42	10.00	359.95	450.54	9554' Hold
20465.50	90.10	359.95	10559.54	10004.24	-89.38	0.00	0.00	10004.64	TD at 20465.50

Formation Tops

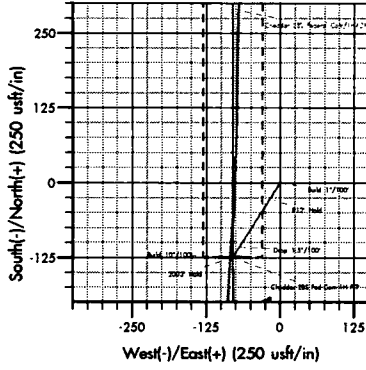
TVDPath	Formation
4613.00	Base of Capitan
4637.00	Lamar
4721.00	Ball Canyon
5518.00	Cherry Canyon
5748.00	Manzanita Line
6848.07	Brushy Canyon
8575.22	Bone Spring Lime
8727.22	Leonard Shale
9614.22	First Bone Spring Sand
9878.22	Second Bone Spring Shale
10283.09	Second Bone Spring Sand

CASING DETAILS

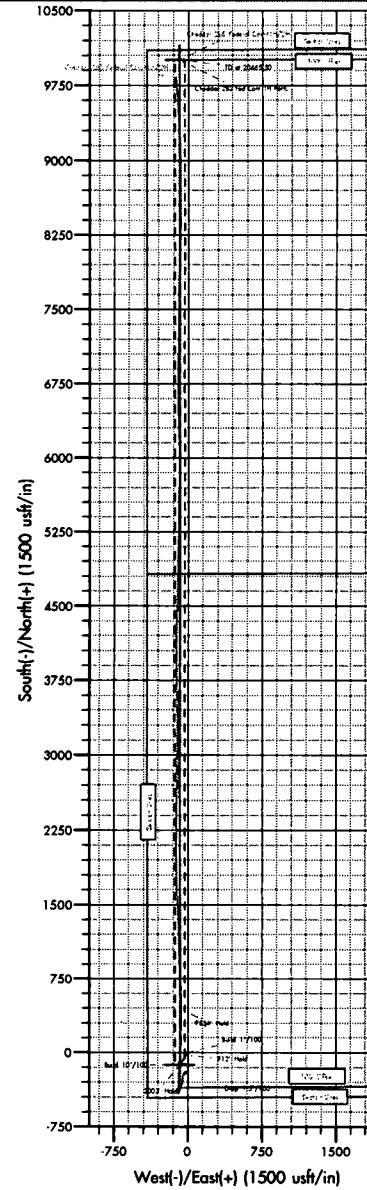
No casing data is available



Azimuths to True North
Magnetic North: 6.91°
Magnetic Field
Strength: 47925.4uT
Dip Angle: 60.20°
Date: 07/12/2018
Model: IGRF2015



Vertical Section at 359.49° (1500 usf/in)



West(-)/East(+) (1500 usf/in)

Plan: Plan #1 (1H/OH)

Created By: Duke Mayne Date: 10/41 July 13 2018

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 1H
Company:	Centennial Resource Development, Inc.	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Project:	Lea Co., NM (NAD83)	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site:	Cheddar 2BS Federal Com	North Reference:	True
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Lea Co., NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Cheddar 2BS Federal Com			
Site Position:		Northing:	515,132.01 usft	Latitude: 32.414594
From:	Map	Easting:	735,525.70 usft	Longitude: -103.704053
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.34 °

Well	1H			
Well Position	+N/-S	0.00 usft	Northing: 515,132.01 usft	Latitude: 32.414594
	+E/-W	0.00 usft	Easting: 735,525.70 usft	Longitude: -103.704053
Position Uncertainty	0.00 usft	Wellhead Elevation:		Ground Level: 3,665.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2015	07/12/18	(°)	(°)	(nT)
			6.91	60.20	47,925.43278724

Design	Plan #1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	359.49	

Plan Survey Tool Program	Date 07/12/18				
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks	
(usft)	(usft)				
1	0.00	20,465.03 Plan #1 (OH)	MWD+IFR1+MS		
			OWSG MWD + IFR1 + Multi-SI		

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,095.00	0.00	0.00	6,095.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,694.89	6.00	212.76	6,693.79	-26.38	-16.98	1.00	1.00	0.00	212.76	
7,606.89	6.00	212.76	7,600.80	-106.53	-68.56	0.00	0.00	0.00	0.00	
8,006.82	0.00	0.00	8,000.00	-124.12	-79.88	1.50	-1.50	0.00	180.00	
10,010.08	0.00	0.00	10,003.26	-124.12	-79.88	0.00	0.00	0.00	0.00	
10,911.08	90.10	359.95	10,576.22	449.84	-80.42	10.00	10.00	0.00	359.95	
20,465.50	90.10	359.95	10,559.54	10,004.24	-89.38	0.00	0.00	0.00	0.00	Cheddar 2BS Fed Co

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Company:	Centennial Resource Development, Inc.	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Project:	Lea Co., NM (NAD83)	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site:	Cheddar 2BS Federal Com	North Reference:	True
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	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
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,613.00	0.00	0.00	4,613.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Capitan									
4,637.00	0.00	0.00	4,637.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar									
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,721.00	0.00	0.00	4,721.00	0.00	0.00	0.00	0.00	0.00	0.00

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MD Reference: KB=25' @ 3690.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Bell Canyon									
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,518.00	0.00	0.00	5,518.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,748.00	0.00	0.00	5,748.00	0.00	0.00	0.00	0.00	0.00	0.00
Manzanita Lime									
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,095.00	0.00	0.00	6,095.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 1°/100'									
6,100.00	0.05	212.76	6,100.00	0.00	0.00	0.00	1.00	1.00	0.00
6,200.00	1.05	212.76	6,199.99	-0.81	-0.52	-0.80	1.00	1.00	0.00
6,300.00	2.05	212.76	6,299.96	-3.08	-1.98	-3.07	1.00	1.00	0.00
6,400.00	3.05	212.76	6,399.86	-6.82	-4.39	-6.79	1.00	1.00	0.00
6,500.00	4.05	212.76	6,499.66	-12.03	-7.74	-11.96	1.00	1.00	0.00
6,600.00	5.05	212.76	6,599.35	-18.70	-12.04	-18.59	1.00	1.00	0.00
6,694.89	6.00	212.76	6,693.79	-26.38	-16.98	-26.23	1.00	1.00	0.00
912' Hold									
6,700.00	6.00	212.76	6,698.88	-26.83	-17.27	-26.68	0.00	0.00	0.00
6,800.00	6.00	212.76	6,798.33	-35.62	-22.93	-35.41	0.00	0.00	0.00
6,850.01	6.00	212.76	6,848.07	-40.02	-25.75	-39.78	0.00	0.00	0.00
Brushy Canyon									
6,900.00	6.00	212.76	6,897.78	-44.41	-28.58	-44.15	0.00	0.00	0.00
7,000.00	6.00	212.76	6,997.23	-53.20	-34.24	-52.89	0.00	0.00	0.00
7,100.00	6.00	212.76	7,096.69	-61.99	-39.89	-61.63	0.00	0.00	0.00
7,200.00	6.00	212.76	7,196.14	-70.77	-45.55	-70.36	0.00	0.00	0.00
7,300.00	6.00	212.76	7,295.59	-79.56	-51.20	-79.10	0.00	0.00	0.00
7,400.00	6.00	212.76	7,395.04	-88.35	-56.86	-87.84	0.00	0.00	0.00
7,500.00	6.00	212.76	7,494.50	-97.14	-62.52	-96.58	0.00	0.00	0.00
7,606.89	6.00	212.76	7,600.80	-106.53	-68.56	-105.92	0.00	0.00	0.00
Drop 1.5°/100'									
7,700.00	4.60	212.76	7,693.51	-113.77	-73.22	-113.11	1.50	-1.50	0.00
7,800.00	3.10	212.76	7,793.28	-119.41	-76.85	-118.72	1.50	-1.50	0.00
7,900.00	1.60	212.76	7,893.19	-122.87	-79.07	-122.15	1.50	-1.50	0.00
8,006.82	0.00	0.00	8,000.00	-124.12	-79.88	-123.40	1.50	-1.50	0.00
2003' Hold									
8,100.00	0.00	0.00	8,093.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
8,200.00	0.00	0.00	8,193.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
8,300.00	0.00	0.00	8,293.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
8,400.00	0.00	0.00	8,393.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
8,500.00	0.00	0.00	8,493.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
8,582.04	0.00	0.00	8,575.22	-124.12	-79.88	-123.40	0.00	0.00	0.00
Bone Spring Lime									

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MD Reference: KB=25' @ 3690.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,600.00	0.00	0.00	8,593.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
8,700.00	0.00	0.00	8,693.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
8,734.04	0.00	0.00	8,727.22	-124.12	-79.88	-123.40	0.00	0.00	0.00
Leonard Shale									
8,800.00	0.00	0.00	8,793.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
8,900.00	0.00	0.00	8,893.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,000.00	0.00	0.00	8,993.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,100.00	0.00	0.00	9,093.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,200.00	0.00	0.00	9,193.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,300.00	0.00	0.00	9,293.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,400.00	0.00	0.00	9,393.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,500.00	0.00	0.00	9,493.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,600.00	0.00	0.00	9,593.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,621.04	0.00	0.00	9,614.22	-124.12	-79.88	-123.40	0.00	0.00	0.00
First Bone Spring Sand									
9,700.00	0.00	0.00	9,693.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,800.00	0.00	0.00	9,793.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
9,885.04	0.00	0.00	9,878.22	-124.12	-79.88	-123.40	0.00	0.00	0.00
Second Bone Spring Shale									
9,900.00	0.00	0.00	9,893.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
10,000.00	0.00	0.00	9,993.18	-124.12	-79.88	-123.40	0.00	0.00	0.00
10,010.08	0.00	0.00	10,003.26	-124.12	-79.88	-123.40	0.00	0.00	0.00
Build 10°/100'									
10,050.00	3.99	359.95	10,043.15	-122.73	-79.88	-122.01	10.00	10.00	0.00
10,100.00	8.99	359.95	10,092.81	-117.08	-79.89	-116.36	10.00	10.00	0.00
10,150.00	13.99	359.95	10,141.79	-107.12	-79.90	-106.40	10.00	10.00	0.00
10,200.00	18.99	359.95	10,189.72	-92.93	-79.91	-92.21	10.00	10.00	0.00
10,250.00	23.99	359.95	10,236.23	-74.62	-79.93	-73.90	10.00	10.00	0.00
10,300.00	28.99	359.95	10,280.97	-52.32	-79.95	-51.61	10.00	10.00	0.00
10,302.43	29.24	359.95	10,283.09	-51.14	-79.95	-50.42	10.00	10.00	0.00
Second Bone Spring Sand									
10,350.00	33.99	359.95	10,323.59	-26.21	-79.97	-25.50	10.00	10.00	0.00
10,400.00	38.99	359.95	10,363.77	3.51	-80.00	4.23	10.00	10.00	0.00
10,450.00	43.99	359.95	10,401.21	36.63	-80.03	37.34	10.00	10.00	0.00
10,500.00	48.99	359.95	10,435.62	72.88	-80.07	73.59	10.00	10.00	0.00
10,550.00	53.99	359.95	10,466.75	112.00	-80.10	112.71	10.00	10.00	0.00
10,600.00	58.99	359.95	10,494.34	153.67	-80.14	154.38	10.00	10.00	0.00
10,650.00	63.99	359.95	10,518.20	197.60	-80.18	198.31	10.00	10.00	0.00
10,700.00	68.99	359.95	10,538.13	243.43	-80.23	244.14	10.00	10.00	0.00
10,750.00	73.99	359.95	10,554.00	290.83	-80.27	291.54	10.00	10.00	0.00
10,800.00	78.99	359.95	10,565.67	339.43	-80.32	340.14	10.00	10.00	0.00
10,850.00	83.99	359.95	10,573.07	388.87	-80.36	389.57	10.00	10.00	0.00
10,900.00	88.99	359.95	10,576.13	438.76	-80.41	439.46	10.00	10.00	0.00
10,911.08	90.10	359.95	10,576.22	449.84	-80.42	450.54	10.00	10.00	0.00
9554' Hold									
11,000.00	90.10	359.95	10,576.06	538.76	-80.50	539.45	0.00	0.00	0.00
11,100.00	90.10	359.95	10,575.89	638.76	-80.60	639.45	0.00	0.00	0.00
11,200.00	90.10	359.95	10,575.71	738.76	-80.69	739.45	0.00	0.00	0.00
11,300.00	90.10	359.95	10,575.54	838.76	-80.78	839.44	0.00	0.00	0.00
11,400.00	90.10	359.95	10,575.36	938.76	-80.88	939.44	0.00	0.00	0.00
11,500.00	90.10	359.95	10,575.19	1,038.76	-80.97	1,039.44	0.00	0.00	0.00
11,600.00	90.10	359.95	10,575.01	1,138.76	-81.07	1,139.43	0.00	0.00	0.00
11,700.00	90.10	359.95	10,574.84	1,238.76	-81.16	1,239.43	0.00	0.00	0.00

Database: EDM 5000.14 Single User Db
Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Cheddar 2BS Federal Com
Well: 1H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well 1H
TVD Reference: KB=25' @ 3690.00usft (H&P 650)
MD Reference: KB=25' @ 3690.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,800.00	90.10	359.95	10,574.66	1,338.76	-81.25	1,339.43	0.00	0.00	0.00
11,900.00	90.10	359.95	10,574.49	1,438.76	-81.35	1,439.42	0.00	0.00	0.00
12,000.00	90.10	359.95	10,574.32	1,538.76	-81.44	1,539.42	0.00	0.00	0.00
12,100.00	90.10	359.95	10,574.14	1,638.75	-81.53	1,639.42	0.00	0.00	0.00
12,200.00	90.10	359.95	10,573.97	1,738.75	-81.63	1,739.41	0.00	0.00	0.00
12,300.00	90.10	359.95	10,573.79	1,838.75	-81.72	1,839.41	0.00	0.00	0.00
12,400.00	90.10	359.95	10,573.62	1,938.75	-81.82	1,939.41	0.00	0.00	0.00
12,500.00	90.10	359.95	10,573.44	2,038.75	-81.91	2,039.40	0.00	0.00	0.00
12,600.00	90.10	359.95	10,573.27	2,138.75	-82.00	2,139.40	0.00	0.00	0.00
12,700.00	90.10	359.95	10,573.09	2,238.75	-82.10	2,239.40	0.00	0.00	0.00
12,800.00	90.10	359.95	10,572.92	2,338.75	-82.19	2,339.39	0.00	0.00	0.00
12,900.00	90.10	359.95	10,572.74	2,438.75	-82.28	2,439.39	0.00	0.00	0.00
13,000.00	90.10	359.95	10,572.57	2,538.75	-82.38	2,539.39	0.00	0.00	0.00
13,100.00	90.10	359.95	10,572.40	2,638.75	-82.47	2,639.38	0.00	0.00	0.00
13,200.00	90.10	359.95	10,572.22	2,738.75	-82.57	2,739.38	0.00	0.00	0.00
13,300.00	90.10	359.95	10,572.05	2,838.75	-82.66	2,839.38	0.00	0.00	0.00
13,400.00	90.10	359.95	10,571.87	2,938.75	-82.75	2,939.37	0.00	0.00	0.00
13,500.00	90.10	359.95	10,571.70	3,038.75	-82.85	3,039.37	0.00	0.00	0.00
13,600.00	90.10	359.95	10,571.52	3,138.75	-82.94	3,139.37	0.00	0.00	0.00
13,700.00	90.10	359.95	10,571.35	3,238.75	-83.03	3,239.36	0.00	0.00	0.00
13,800.00	90.10	359.95	10,571.17	3,338.75	-83.13	3,339.36	0.00	0.00	0.00
13,900.00	90.10	359.95	10,571.00	3,438.75	-83.22	3,439.36	0.00	0.00	0.00
14,000.00	90.10	359.95	10,570.82	3,538.75	-83.32	3,539.35	0.00	0.00	0.00
14,100.00	90.10	359.95	10,570.65	3,638.75	-83.41	3,639.35	0.00	0.00	0.00
14,200.00	90.10	359.95	10,570.48	3,738.75	-83.50	3,739.35	0.00	0.00	0.00
14,300.00	90.10	359.95	10,570.30	3,838.75	-83.60	3,839.34	0.00	0.00	0.00
14,400.00	90.10	359.95	10,570.13	3,938.75	-83.69	3,939.34	0.00	0.00	0.00
14,500.00	90.10	359.95	10,569.95	4,038.75	-83.78	4,039.34	0.00	0.00	0.00
14,600.00	90.10	359.95	10,569.78	4,138.75	-83.88	4,139.33	0.00	0.00	0.00
14,700.00	90.10	359.95	10,569.60	4,238.75	-83.97	4,239.33	0.00	0.00	0.00
14,800.00	90.10	359.95	10,569.43	4,338.75	-84.07	4,339.33	0.00	0.00	0.00
14,900.00	90.10	359.95	10,569.25	4,438.75	-84.16	4,439.32	0.00	0.00	0.00
15,000.00	90.10	359.95	10,569.08	4,538.75	-84.25	4,539.32	0.00	0.00	0.00
15,100.00	90.10	359.95	10,568.90	4,638.75	-84.35	4,639.32	0.00	0.00	0.00
15,200.00	90.10	359.95	10,568.73	4,738.75	-84.44	4,739.31	0.00	0.00	0.00
15,300.00	90.10	359.95	10,568.56	4,838.75	-84.53	4,839.31	0.00	0.00	0.00
15,400.00	90.10	359.95	10,568.38	4,938.75	-84.63	4,939.31	0.00	0.00	0.00
15,500.00	90.10	359.95	10,568.21	5,038.75	-84.72	5,039.30	0.00	0.00	0.00
15,600.00	90.10	359.95	10,568.03	5,138.75	-84.82	5,139.30	0.00	0.00	0.00
15,700.00	90.10	359.95	10,567.86	5,238.75	-84.91	5,239.30	0.00	0.00	0.00
15,800.00	90.10	359.95	10,567.68	5,338.75	-85.00	5,339.29	0.00	0.00	0.00
15,900.00	90.10	359.95	10,567.51	5,438.75	-85.10	5,439.29	0.00	0.00	0.00
16,000.00	90.10	359.95	10,567.33	5,538.75	-85.19	5,539.29	0.00	0.00	0.00
16,100.00	90.10	359.95	10,567.16	5,638.75	-85.28	5,639.28	0.00	0.00	0.00
16,200.00	90.10	359.95	10,566.98	5,738.75	-85.38	5,739.28	0.00	0.00	0.00
16,300.00	90.10	359.95	10,566.81	5,838.75	-85.47	5,839.28	0.00	0.00	0.00
16,400.00	90.10	359.95	10,566.64	5,938.75	-85.57	5,939.27	0.00	0.00	0.00
16,500.00	90.10	359.95	10,566.46	6,038.75	-85.66	6,039.27	0.00	0.00	0.00
16,600.00	90.10	359.95	10,566.29	6,138.75	-85.75	6,139.27	0.00	0.00	0.00
16,700.00	90.10	359.95	10,566.11	6,238.75	-85.85	6,239.26	0.00	0.00	0.00
16,800.00	90.10	359.95	10,565.94	6,338.75	-85.94	6,339.26	0.00	0.00	0.00
16,900.00	90.10	359.95	10,565.76	6,438.75	-86.03	6,439.26	0.00	0.00	0.00
17,000.00	90.10	359.95	10,565.59	6,538.75	-86.13	6,539.25	0.00	0.00	0.00
17,100.00	90.10	359.95	10,565.41	6,638.75	-86.22	6,639.25	0.00	0.00	0.00

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 1H
Company:	Centennial Resource Development, Inc.	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Project:	Lea Co., NM (NAD83)	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site:	Cheddar 2BS Federal Com	North Reference:	True
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,200.00	90.10	359.95	10,565.24	6,738.74	-86.32	6,739.25	0.00	0.00	0.00
17,300.00	90.10	359.95	10,565.07	6,838.74	-86.41	6,839.24	0.00	0.00	0.00
17,400.00	90.10	359.95	10,564.89	6,938.74	-86.50	6,939.24	0.00	0.00	0.00
17,500.00	90.10	359.95	10,564.72	7,038.74	-86.60	7,039.24	0.00	0.00	0.00
17,600.00	90.10	359.95	10,564.54	7,138.74	-86.69	7,139.23	0.00	0.00	0.00
17,700.00	90.10	359.95	10,564.37	7,238.74	-86.78	7,239.23	0.00	0.00	0.00
17,800.00	90.10	359.95	10,564.19	7,338.74	-86.88	7,339.23	0.00	0.00	0.00
17,900.00	90.10	359.95	10,564.02	7,438.74	-86.97	7,439.22	0.00	0.00	0.00
18,000.00	90.10	359.95	10,563.84	7,538.74	-87.07	7,539.22	0.00	0.00	0.00
18,100.00	90.10	359.95	10,563.67	7,638.74	-87.16	7,639.22	0.00	0.00	0.00
18,200.00	90.10	359.95	10,563.49	7,738.74	-87.25	7,739.21	0.00	0.00	0.00
18,300.00	90.10	359.95	10,563.32	7,838.74	-87.35	7,839.21	0.00	0.00	0.00
18,400.00	90.10	359.95	10,563.15	7,938.74	-87.44	7,939.21	0.00	0.00	0.00
18,500.00	90.10	359.95	10,562.97	8,038.74	-87.53	8,039.20	0.00	0.00	0.00
18,600.00	90.10	359.95	10,562.80	8,138.74	-87.63	8,139.20	0.00	0.00	0.00
18,700.00	90.10	359.95	10,562.62	8,238.74	-87.72	8,239.20	0.00	0.00	0.00
18,800.00	90.10	359.95	10,562.45	8,338.74	-87.82	8,339.19	0.00	0.00	0.00
18,900.00	90.10	359.95	10,562.27	8,438.74	-87.91	8,439.19	0.00	0.00	0.00
19,000.00	90.10	359.95	10,562.10	8,538.74	-88.00	8,539.19	0.00	0.00	0.00
19,100.00	90.10	359.95	10,561.92	8,638.74	-88.10	8,639.18	0.00	0.00	0.00
19,200.00	90.10	359.95	10,561.75	8,738.74	-88.19	8,739.18	0.00	0.00	0.00
19,300.00	90.10	359.95	10,561.57	8,838.74	-88.28	8,839.18	0.00	0.00	0.00
19,400.00	90.10	359.95	10,561.40	8,938.74	-88.38	8,939.17	0.00	0.00	0.00
19,500.00	90.10	359.95	10,561.23	9,038.74	-88.47	9,039.17	0.00	0.00	0.00
19,600.00	90.10	359.95	10,561.05	9,138.74	-88.57	9,139.17	0.00	0.00	0.00
19,700.00	90.10	359.95	10,560.88	9,238.74	-88.66	9,239.16	0.00	0.00	0.00
19,800.00	90.10	359.95	10,560.70	9,338.74	-88.75	9,339.16	0.00	0.00	0.00
19,900.00	90.10	359.95	10,560.53	9,438.74	-88.85	9,439.16	0.00	0.00	0.00
20,000.00	90.10	359.95	10,560.35	9,538.74	-88.94	9,539.15	0.00	0.00	0.00
20,100.00	90.10	359.95	10,560.18	9,638.74	-89.03	9,639.15	0.00	0.00	0.00
20,200.00	90.10	359.95	10,560.00	9,738.74	-89.13	9,739.15	0.00	0.00	0.00
20,300.00	90.10	359.95	10,559.83	9,838.74	-89.22	9,839.14	0.00	0.00	0.00
20,400.00	90.10	359.95	10,559.65	9,938.74	-89.32	9,939.14	0.00	0.00	0.00
20,465.50	90.10	359.95	10,559.54	10,004.24	-89.38	10,004.64	0.00	0.00	0.00
TD at 20465.50									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Cheddar 2BS Fed Com	0.00	0.00	10,559.54	10,004.24	-89.38	525,135.55	735,377.42	32.442092	-103.704343
- plan hits target center									
- Point									
Cheddar 2BS Fed Com	0.00	0.00	10,577.00	-124.12	-79.88	515,007.42	735,446.55	32.414252	-103.704312
- plan misses target center by 237.99usft at 10454.43usft MD (10404.39 TVD, 39.72 N, -80.04 E)									
- Point									

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well 1H
Company:	Centennial Resource Development, Inc.	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Project:	Lea Co., NM (NAD83)	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site:	Cheddar 2BS Federal Com	North Reference:	True
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,613.00	4,613.00	Base of Capitan		-0.10	359.49	
4,637.00	4,637.00	Lamar		-0.10	359.49	
4,721.00	4,721.00	Bell Canyon		-0.10	359.49	
5,518.00	5,518.00	Cherry Canyon		-0.10	359.49	
5,748.00	5,748.00	Manzanita Lime		-0.10	359.49	
6,850.01	6,848.07	Brushy Canyon		-0.10	359.49	
8,582.04	8,575.22	Bone Spring Lime		-0.10	359.49	
8,734.04	8,727.22	Leonard Shale		-0.10	359.49	
9,621.04	9,614.22	First Bone Spring Sand		-0.10	359.49	
9,885.04	9,878.22	Second Bone Spring Shale		-0.10	359.49	
10,302.43	10,283.09	Second Bone Spring Sand		-0.10	359.49	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N-S (usft)	+E-W (usft)	Comment	
6,095.00	6,095.00	0.00	0.00	Build 1"/100'	
6,694.89	6,693.79	-26.38	-16.98	912' Hold	
7,606.89	7,600.80	-106.53	-68.56	Drop 1.5"/100'	
8,006.82	8,000.00	-124.12	-79.88	2003' Hold	
10,010.08	10,003.26	-124.12	-79.88	Build 10"/100'	
10,911.08	10,576.22	449.84	-80.42	9554' Hold	
20,465.50	10,559.54	10,004.24	-89.38	TD at 20465.50	

Centennial Resource Development, Inc.

**Lea Co., NM (NAD83)
Cheddar 2BS Federal Com
1H**

**OH
Plan #1**

Anticollision Report

12 July, 2018

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 1H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Reference Site:	Cheddar 2BS Federal Com	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 9,999.98 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	07/12/18		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	20,465.03	Plan #1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Cheddar 3BS Federal Com						
1H - OH - OH	2,700.98	2,700.25	192.93	174.20	10.297	CC
1H - OH - OH	7,608.25	7,587.62	222.87	170.19	4.231	ES
1H - OH - OH	10,010.08	10,011.04	282.88	213.09	4.053	SF

Offset Design Cheddar 3BS Federal Com - 1H - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 183-MWD+IFR1+MS													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-169.27	-209.98	-39.78	213.72				
100.00	100.00	99.91	99.91	0.13	0.15	-169.27	-209.77	-39.74	213.50	213.22	0.29	745.309	
200.00	200.00	200.68	200.67	0.49	0.38	-169.30	-209.16	-39.54	212.87	212.00	0.87	243.386	
290.09	290.09	289.10	289.09	0.82	0.69	-169.58	-208.79	-38.39	212.29	210.78	1.51	140.633	
300.00	300.00	298.58	298.57	0.85	0.73	-169.63	-208.83	-38.23	212.30	210.72	1.58	134.510	
400.00	400.00	400.45	400.42	1.21	1.09	-170.09	-209.40	-36.57	212.57	210.28	2.30	92.598	
500.00	500.00	501.37	501.34	1.57	1.44	-170.21	-208.42	-35.97	211.51	208.50	3.01	70.296	
600.00	600.00	601.38	601.33	1.93	1.79	-169.94	-207.16	-36.75	210.40	206.69	3.72	56.591	
700.00	700.00	701.60	701.53	2.29	2.14	-170.04	-206.05	-36.18	209.22	204.79	4.43	47.232	
800.00	800.00	801.74	801.66	2.64	2.50	-170.44	-205.13	-34.55	208.03	202.89	5.15	40.431	
900.00	900.00	901.57	901.47	3.00	2.86	-170.86	-204.03	-32.83	206.67	200.81	5.86	35.265	
1,000.00	1,000.00	1,000.71	1,000.60	3.36	3.21	-171.07	-203.24	-31.93	205.74	199.16	6.57	31.298	
1,100.00	1,100.00	1,099.93	1,099.81	3.72	3.57	-171.14	-202.67	-31.60	205.12	197.83	7.29	28.153	
1,200.00	1,200.00	1,199.78	1,199.67	4.08	3.92	-171.22	-202.42	-31.27	204.82	196.82	8.00	25.603	
1,300.00	1,300.00	1,300.15	1,300.04	4.44	4.28	-171.21	-202.01	-31.24	204.41	195.70	8.71	23.456	
1,400.00	1,400.00	1,399.80	1,399.69	4.79	4.63	-171.20	-201.56	-31.22	203.97	194.54	9.43	21.635	
1,500.00	1,500.00	1,500.07	1,499.96	5.15	4.99	-171.25	-201.20	-30.97	203.57	193.43	10.14	20.067	
1,600.00	1,600.00	1,600.10	1,599.99	5.51	5.35	-171.35	-200.78	-30.55	203.09	192.23	10.86	18.699	
1,700.00	1,700.00	1,700.13	1,700.01	5.87	5.71	-171.46	-200.36	-30.08	202.60	191.03	11.58	17.500	
1,800.00	1,800.00	1,800.19	1,800.07	6.23	6.07	-171.60	-199.93	-29.52	202.10	189.80	12.29	16.439	
1,900.00	1,900.00	1,900.46	1,900.33	6.59	6.42	-171.69	-199.39	-29.14	201.51	188.50	13.01	15.487	
2,000.00	2,000.00	2,000.84	2,000.71	6.95	6.78	-171.83	-198.71	-28.54	200.76	187.03	13.73	14.623	
2,100.00	2,100.00	2,101.26	2,101.12	7.30	7.14	-172.16	-197.92	-27.25	199.79	185.35	14.45	13.830	
2,200.00	2,200.00	2,201.51	2,201.35	7.66	7.50	-172.61	-197.00	-25.55	198.66	183.50	15.16	13.102	

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

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 1H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Reference Site:	Cheddar 2BS Federal Com	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Cheddar 3BS Federal Com - 1H - OH - OH													Offset Site Error:
Survey Program: 163-MWD+FR1+MS													0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
2,300.00	2,300.00	2,301.67	2,301.49	8.02	7.86	-173.09	-195.99	-23.74	197.44	181.56	15.88	12.434	
2,400.00	2,400.00	2,401.78	2,401.58	8.38	8.22	-173.62	-194.91	-21.79	196.14	179.55	16.60	11.819	
2,500.00	2,500.00	2,501.94	2,501.71	8.74	8.58	-174.15	-193.77	-19.87	194.80	177.49	17.31	11.252	
2,600.00	2,600.00	2,601.27	2,601.01	9.10	8.93	-174.71	-192.68	-17.86	193.52	175.49	18.03	10.735	
2,700.00	2,700.00	2,699.29	2,699.02	9.45	9.28	-175.08	-192.22	-16.53	192.93	174.20	18.73	10.300	
2,700.98	2,700.98	2,700.25	2,699.98	9.46	9.28	-175.09	-192.22	-16.52	192.93	174.20	18.74	10.297 CC	
2,800.00	2,800.00	2,797.57	2,797.30	9.81	9.61	-175.11	-192.69	-16.47	193.40	173.98	19.42	9.958	
2,900.00	2,900.00	2,897.61	2,897.33	10.17	9.94	-175.01	-193.59	-16.89	194.34	174.23	20.11	9.663	
3,000.00	3,000.00	2,998.38	2,998.10	10.53	10.28	-175.04	-194.28	-16.86	195.01	174.20	20.81	9.371	
3,100.00	3,100.00	3,097.63	3,097.35	10.89	10.62	-175.12	-194.93	-16.65	195.65	174.14	21.50	9.098	
3,200.00	3,200.00	3,197.35	3,197.06	11.25	10.95	-175.02	-195.81	-17.08	196.56	174.37	22.20	8.855	
3,300.00	3,300.00	3,297.47	3,297.18	11.61	11.29	-174.69	-196.67	-18.29	197.52	174.63	22.89	8.629	
3,400.00	3,400.00	3,397.95	3,397.65	11.96	11.63	-174.55	-197.45	-18.85	198.35	174.77	23.59	8.409	
3,500.00	3,500.00	3,498.09	3,497.79	12.32	11.97	-174.75	-197.99	-18.20	198.83	174.53	24.30	8.184	
3,600.00	3,600.00	3,595.53	3,595.21	12.68	12.31	-174.94	-199.26	-17.63	200.07	175.09	24.99	8.007	
3,700.00	3,700.00	3,693.70	3,693.35	13.04	12.65	-175.07	-201.73	-17.40	202.56	176.88	25.68	7.889	
3,800.00	3,800.00	3,795.10	3,794.72	13.40	13.00	-175.12	-204.43	-17.44	205.22	178.83	26.39	7.777	
3,900.00	3,900.00	3,898.31	3,897.92	13.76	13.36	-175.21	-205.73	-17.23	206.46	179.35	27.11	7.616	
4,000.00	4,000.00	3,999.29	3,998.90	14.11	13.71	-175.31	-205.88	-16.90	206.57	178.75	27.82	7.425	
4,100.00	4,100.00	4,098.20	4,097.80	14.47	14.05	-175.29	-206.11	-17.00	206.81	178.29	28.52	7.252	
4,200.00	4,200.00	4,197.44	4,197.04	14.83	14.39	-175.30	-206.93	-17.01	207.64	178.42	29.22	7.107	
4,300.00	4,300.00	4,296.73	4,296.32	15.19	14.74	-175.51	-208.07	-16.32	208.73	178.81	29.92	6.976	
4,400.00	4,400.00	4,396.86	4,396.44	15.55	15.08	-175.59	-209.40	-16.14	210.03	179.40	30.63	6.858	
4,500.00	4,500.00	4,497.29	4,496.86	15.91	15.43	-175.28	-210.43	-17.37	211.15	179.82	31.33	6.740	
4,600.00	4,600.00	4,597.76	4,597.32	16.27	15.77	-174.86	-211.20	-19.00	212.06	180.02	32.03	6.620	
4,700.00	4,700.00	4,697.88	4,697.42	16.62	16.11	-174.41	-211.81	-20.74	212.82	180.09	32.73	6.502	
4,800.00	4,800.00	4,797.70	4,797.22	16.98	16.45	-174.03	-212.46	-22.23	213.62	180.19	33.43	6.389	
4,900.00	4,900.00	4,897.75	4,897.26	17.34	16.80	-173.69	-213.11	-23.58	214.41	180.28	34.14	6.281	
5,000.00	5,000.00	4,997.35	4,996.85	17.70	17.14	-173.29	-213.92	-25.16	215.40	180.57	34.84	6.183	
5,100.00	5,100.00	5,098.22	5,097.70	18.06	17.49	-172.86	-214.43	-26.85	216.11	180.57	35.54	6.080	
5,200.00	5,200.00	5,197.99	5,197.45	18.42	17.83	-172.43	-214.93	-28.55	216.83	180.58	36.25	5.982	
5,300.00	5,300.00	5,298.27	5,297.71	18.77	18.18	-171.95	-215.31	-30.44	217.45	180.50	36.95	5.885	
5,400.00	5,400.00	5,398.49	5,397.92	19.13	18.52	-171.47	-215.61	-32.33	218.03	180.37	37.66	5.790	
5,500.00	5,500.00	5,499.03	5,498.43	19.49	18.87	-170.99	-215.71	-34.21	218.40	180.04	38.36	5.693	
5,600.00	5,600.00	5,598.94	5,598.33	19.85	19.22	-170.57	-215.67	-35.82	218.63	179.56	39.07	5.596	
5,700.00	5,700.00	5,699.23	5,698.62	20.21	19.57	-170.16	-215.71	-37.43	218.94	179.16	39.78	5.504	
5,800.00	5,800.00	5,799.46	5,798.83	20.57	19.92	-169.73	-215.51	-39.06	219.03	178.54	40.48	5.410	
5,900.00	5,900.00	5,899.48	5,898.84	20.93	20.26	-169.36	-215.34	-40.45	219.10	177.91	41.19	5.319	
6,000.00	6,000.00	6,000.47	5,999.82	21.28	20.62	-168.99	-214.96	-41.81	218.99	177.09	41.90	5.227	
6,095.00	6,095.00	6,095.68	6,095.02	21.62	20.95	-168.70	-214.33	-42.85	218.57	176.00	42.57	5.134	
6,100.00	6,100.00	6,100.68	6,100.02	21.64	20.97	-21.44	-214.29	-42.90	218.54	175.94	42.61	5.129	
6,200.00	6,199.99	6,196.61	6,195.94	21.97	21.30	-21.27	-214.48	-43.96	218.07	174.80	43.26	5.040	
6,227.09	6,227.08	6,222.07	6,221.40	22.06	21.39	-21.26	-214.88	-44.26	218.02	174.58	43.44	5.019	
6,300.00	6,299.96	6,290.40	6,289.69	22.29	21.63	-21.31	-216.91	-45.25	218.35	174.46	43.89	4.975	
6,400.00	6,399.86	6,385.54	6,384.69	22.62	21.96	-21.52	-221.77	-46.94	219.57	175.07	44.50	4.934	
6,500.00	6,499.66	6,482.76	6,481.67	22.95	22.30	-21.92	-228.40	-48.92	220.91	175.77	45.14	4.894	
6,600.00	6,599.35	6,580.69	6,579.27	23.28	22.64	-22.66	-236.24	-50.47	221.73	175.95	45.78	4.843	
6,694.89	6,693.79	6,674.57	6,672.78	23.59	22.97	-23.70	-244.49	-51.38	221.71	175.30	46.41	4.777	
6,700.00	6,698.88	6,679.68	6,677.86	23.60	22.99	-23.76	-244.95	-51.42	221.68	175.23	46.45	4.773	
6,800.00	6,798.33	6,779.51	6,777.29	23.93	23.34	-24.99	-253.92	-52.32	221.18	174.05	47.12	4.694	
6,900.00	6,897.78	6,878.77	6,876.12	24.26	23.69	-26.23	-263.05	-53.13	220.98	173.19	47.79	4.624	
6,915.14	6,912.84	6,893.87	6,891.16	24.31	23.74	-26.43	-264.46	-53.25	220.98	173.08	47.90	4.614	

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

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Cheddar 2BS Federal Com
Site Error: 0.00 usft
Reference Well: 1H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well 1H
TVD Reference: KB=25' @ 3690.00usft (H&P 650)
MD Reference: KB=25' @ 3690.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at: 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design Cheddar 3BS Federal Com - 1H - OH - OH													Offset Site Error:
Survey Program: 163-MWD+IFR1+MS													Offset Well Error:
Reference		Offset		Semi Major Axis		Distance		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,000.00	6,997.23	6,978.53	6,975.44	24.59	24.04	-27.48	-272.36	-53.99	221.04	172.56	48.47	4.560	
7,100.00	7,096.69	7,078.23	7,074.70	24.93	24.39	-28.68	-281.72	-55.03	221.25	172.10	49.15	4.501	
7,200.00	7,196.14	7,178.00	7,174.01	25.26	24.74	-29.90	-291.20	-55.98	221.68	171.84	49.84	4.448	
7,300.00	7,295.59	7,277.97	7,273.53	25.59	25.09	-31.11	-300.65	-57.00	222.17	171.64	50.52	4.397	
7,400.00	7,395.04	7,378.42	7,373.51	25.93	25.45	-32.05	-310.08	-59.04	222.69	171.47	51.22	4.348	
7,500.00	7,494.50	7,479.12	7,473.77	26.27	25.80	-32.76	-319.12	-61.98	222.88	170.94	51.93	4.292	
7,606.89	7,600.80	7,586.27	7,580.45	26.63	26.18	-33.54	-328.53	-65.00	222.87	170.20	52.67	4.231	
7,608.25	7,602.15	7,587.62	7,581.80	26.63	26.19	-33.55	-328.65	-65.05	222.87	170.19	52.68	4.231 ES	
7,700.00	7,693.51	7,680.40	7,674.20	26.94	26.52	-34.00	-336.57	-67.94	223.62	170.29	53.33	4.193	
7,800.00	7,793.28	7,780.75	7,774.17	27.28	26.87	-34.15	-344.72	-70.99	226.11	172.08	54.03	4.185	
7,900.00	7,893.19	7,880.44	7,873.48	27.62	27.23	-33.91	-352.82	-74.23	230.76	176.05	54.72	4.217	
8,006.82	8,000.00	7,984.57	7,977.15	27.99	27.60	179.53	-361.80	-77.94	238.69	183.27	55.42	4.307	
8,100.00	8,093.18	8,077.60	8,069.74	28.32	27.93	-179.70	-370.30	-81.17	247.20	191.11	56.09	4.407	
8,200.00	8,193.18	8,179.30	8,171.01	28.68	28.29	-179.10	-379.10	-83.87	255.88	199.05	56.83	4.503	
8,300.00	8,293.18	8,281.67	8,273.07	29.03	28.65	-178.85	-387.09	-85.17	263.72	206.14	57.58	4.580	
8,400.00	8,393.18	8,386.50	8,377.69	29.39	29.03	-178.73	-393.58	-85.84	269.92	211.57	58.34	4.626	
8,500.00	8,493.18	8,488.96	8,480.03	29.75	29.39	-178.62	-398.58	-86.49	274.81	215.73	59.08	4.652	
8,600.00	8,593.18	8,593.11	8,584.09	30.10	29.76	-178.37	-402.54	-87.82	278.65	218.83	59.81	4.659	
8,700.00	8,693.18	8,697.01	8,687.96	30.46	30.13	-178.10	-404.55	-89.20	280.61	220.07	60.54	4.635	
8,800.00	8,793.18	8,798.30	8,789.24	30.82	30.49	-177.89	-405.80	-90.26	281.89	220.63	61.26	4.602	
8,900.00	8,893.18	8,896.24	8,887.17	31.17	30.84	-177.88	-406.97	-90.36	283.09	221.13	61.96	4.569	
9,000.00	8,993.18	8,995.79	8,986.70	31.53	31.19	-177.97	-409.01	-89.99	285.12	222.46	62.67	4.550	
9,100.00	9,093.18	9,096.05	9,086.94	31.89	31.54	-178.06	-410.87	-89.60	286.96	223.58	63.38	4.528	
9,200.00	9,193.18	9,195.88	9,186.75	32.24	31.90	-178.07	-412.71	-89.61	288.81	224.72	64.09	4.506	
9,300.00	9,293.18	9,302.10	9,292.96	32.60	32.27	-178.05	-413.71	-89.74	289.76	224.95	64.81	4.471	
9,400.00	9,393.18	9,405.53	9,396.40	32.96	32.62	-178.05	-412.81	-89.70	288.89	223.38	65.51	4.410	
9,500.00	9,493.18	9,506.25	9,497.09	33.31	32.97	-178.08	-411.18	-89.53	287.26	221.05	66.21	4.339	
9,600.00	9,593.18	9,604.40	9,595.23	33.67	33.30	-177.84	-409.78	-90.66	285.88	218.97	66.91	4.273	
9,700.00	9,693.18	9,703.61	9,694.43	34.03	33.65	-177.58	-408.91	-91.92	285.05	217.44	67.61	4.216	
9,800.00	9,793.18	9,804.35	9,795.15	34.38	34.00	-177.27	-407.82	-93.41	284.04	215.72	68.32	4.158	
9,900.00	9,893.18	9,903.15	9,893.94	34.74	34.34	-177.14	-406.94	-94.02	283.17	214.16	69.02	4.103	
9,991.57	9,984.75	9,992.96	9,983.75	35.07	34.64	-177.14	-406.63	-94.02	282.87	213.21	69.66	4.061	
10,000.00	9,993.18	10,001.19	9,991.98	35.10	34.67	-177.14	-406.64	-94.00	282.87	213.15	69.72	4.057	
10,010.08	10,003.26	10,011.04	10,001.83	35.13	34.71	-177.15	-406.65	-93.96	282.88	213.09	69.79	4.053 SF	
10,050.00	10,043.15	10,049.99	10,040.78	35.28	34.84	-177.14	-406.78	-93.77	284.39	214.33	70.07	4.059	
10,100.00	10,092.81	10,099.53	10,090.32	35.45	35.02	-177.21	-407.05	-93.56	290.29	219.87	70.42	4.122	
10,150.00	10,141.79	10,148.50	10,139.30	35.62	35.19	-177.25	-407.30	-93.60	300.49	229.73	70.76	4.247	
10,200.00	10,189.72	10,198.54	10,189.33	35.79	35.36	-177.34	-407.38	-93.46	314.74	243.64	71.10	4.427	
10,250.00	10,236.23	10,247.30	10,238.09	35.95	35.53	-177.53	-407.15	-92.79	332.79	261.38	71.42	4.660	
10,300.00	10,280.97	10,288.99	10,279.77	36.09	35.68	-177.69	-407.05	-92.15	354.94	283.23	71.71	4.949	
10,350.00	10,323.59	10,328.99	10,319.76	36.23	35.82	-177.81	-407.23	-91.64	381.21	309.22	71.99	5.295	
10,400.00	10,363.77	10,366.42	10,357.19	36.37	35.95	-177.88	-407.63	-91.30	411.34	339.10	72.24	5.694	
10,450.00	10,401.21	10,400.91	10,391.68	36.50	36.07	-177.90	-408.20	-91.12	445.05	372.58	72.47	6.141	
10,500.00	10,435.62	10,432.41	10,423.17	36.62	36.18	-177.86	-408.89	-91.08	482.03	409.36	72.67	6.633	
10,550.00	10,466.75	10,462.47	10,453.22	36.73	36.29	-177.77	-409.60	-91.15	521.87	449.01	72.85	7.163	
10,600.00	10,494.34	10,488.94	10,479.68	36.83	36.38	-177.60	-410.24	-91.31	564.19	491.18	73.01	7.727	
10,650.00	10,518.20	10,511.62	10,502.36	36.92	36.46	-177.31	-410.79	-91.51	608.67	535.53	73.14	8.322	
10,700.00	10,538.13	10,531.14	10,521.87	37.00	36.53	-176.85	-411.25	-91.74	654.97	581.71	73.25	8.941	
10,750.00	10,554.00	10,547.55	10,538.27	37.07	36.59	-176.07	-411.61	-91.94	702.70	629.36	73.34	9.582	
10,800.00	10,565.67	10,559.49	10,550.21	37.13	36.63	-174.49	-411.85	-92.08	751.52	678.11	73.40	10.239	
10,850.00	10,573.07	10,566.77	10,557.48	37.17	36.66	-169.74	-411.99	-92.16	801.07	727.63	73.44	10.908	
10,900.00	10,576.13	10,569.22	10,559.94	37.21	36.66	-88.99	-412.03	-92.19	851.00	777.55	73.45	11.586	

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

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 1H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Reference Site:	Cheddar 2BS Federal Com	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Cheddar 3BS Federal Com - 1H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 163-MWD+HFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance		Between Centres		Minimum Separation	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Ellipses (usft)	Separation (usft)			
10,911.08	10,576.22	10,569.10	10,559.82	37.22	36.66	-36.65	-412.03	-92.19	862.08	788.63	73.45	11.736		
11,000.00	10,576.06	10,567.10	10,557.82	37.28	36.66	-33.59	-411.99	-92.17	950.98	877.52	73.45	12.946		
11,100.00	10,575.89	10,564.78	10,555.50	37.36	36.65	-30.56	-411.95	-92.14	1,050.95	977.49	73.46	14.307		
11,200.00	10,575.71	12,637.39	11,668.64	37.45	41.55	179.87	804.19	-78.31	1,095.89	1,048.36	47.53	23.057		
11,300.00	10,575.54	12,706.86	11,665.95	37.57	41.68	-180.00	873.56	-80.86	1,091.97	1,044.17	47.80	22.844		
11,400.00	10,575.36	12,796.99	11,663.52	37.69	41.85	-179.85	963.60	-83.85	1,089.45	1,041.17	48.28	22.566		
11,500.00	10,575.19	12,883.35	11,662.06	37.84	42.02	-179.72	1,049.91	-86.36	1,087.95	1,039.17	48.78	22.305		
11,559.51	10,575.08	12,933.61	11,661.75	37.93	42.12	-179.65	1,100.16	-87.76	1,087.69	1,038.59	49.09	22.156		
11,600.00	10,575.01	12,967.55	11,661.78	37.99	42.19	-179.59	1,134.07	-88.84	1,087.81	1,038.50	49.31	22.061		
11,700.00	10,574.84	13,084.15	11,661.83	38.17	42.45	-179.36	1,250.59	-93.42	1,088.13	1,038.05	50.08	21.729		
11,778.95	10,574.70	13,153.23	11,661.31	38.32	42.61	-179.19	1,319.59	-96.60	1,087.72	1,037.15	50.57	21.510		
11,800.00	10,574.66	13,171.29	11,661.29	38.35	42.65	-179.15	1,337.63	-97.47	1,087.75	1,037.05	50.70	21.455		
11,900.00	10,574.49	13,265.70	11,661.61	38.56	42.88	-178.92	1,431.94	-101.78	1,088.34	1,036.93	51.41	21.171		
12,000.00	10,574.32	13,391.80	11,661.01	38.77	43.21	-178.63	1,557.90	-107.47	1,088.18	1,035.79	52.39	20.771		
12,100.00	10,574.14	13,506.08	11,657.45	39.00	43.53	-178.34	1,671.99	-113.07	1,085.28	1,031.93	53.34	20.346		
12,200.00	10,573.97	13,589.55	11,655.39	39.24	43.77	-178.17	1,755.38	-116.14	1,083.10	1,029.05	54.05	20.040		
12,277.43	10,573.83	13,652.00	11,654.80	39.44	43.95	-178.08	1,817.80	-117.95	1,082.58	1,027.98	54.60	19.828		
12,300.00	10,573.79	13,668.22	11,654.81	39.50	44.00	-178.06	1,834.01	-118.33	1,082.65	1,027.90	54.75	19.775		
12,400.00	10,573.62	13,739.83	11,656.04	39.77	44.22	-178.03	1,905.60	-119.04	1,084.57	1,029.13	55.44	19.564		
12,500.00	10,573.44	13,868.20	11,658.55	40.05	44.62	-178.04	2,033.94	-118.99	1,086.75	1,030.15	56.60	19.200		
12,586.63	10,573.29	13,961.50	11,658.12	40.31	44.92	-178.02	2,127.24	-119.59	1,086.48	1,028.98	57.50	18.895		
12,600.00	10,573.27	13,971.32	11,658.12	40.35	44.95	-178.01	2,137.06	-119.66	1,086.50	1,028.91	57.60	18.864		
12,700.00	10,573.09	14,053.80	11,659.37	40.66	45.23	-178.02	2,219.53	-119.62	1,088.09	1,029.66	58.43	18.622		
12,800.00	10,572.92	14,148.65	11,661.33	40.98	45.56	-178.11	2,314.35	-118.09	1,090.28	1,030.88	59.40	18.355		
12,900.00	10,572.74	14,259.89	11,662.87	41.31	45.95	-178.26	2,425.54	-115.50	1,091.71	1,031.17	60.54	18.032		
13,000.00	10,572.57	14,349.75	11,664.44	41.65	46.28	-178.39	2,515.35	-113.16	1,093.56	1,032.05	61.51	17.780		
13,100.00	10,572.40	14,452.57	11,666.95	42.01	46.66	-178.54	2,618.11	-110.31	1,096.11	1,033.49	62.61	17.506		
13,200.00	10,572.22	14,549.60	11,668.50	42.37	47.04	-178.65	2,715.10	-108.39	1,097.84	1,034.15	63.69	17.238		
13,300.00	10,572.05	14,632.76	11,671.02	42.75	47.37	-178.74	2,798.21	-106.89	1,100.99	1,036.34	64.64	17.032		
13,400.00	10,571.87	14,727.76	11,675.04	43.13	47.75	-178.83	2,893.11	-105.29	1,105.34	1,039.61	65.73	16.816		
13,500.00	10,571.70	14,833.57	11,679.00	43.53	48.19	-178.88	2,998.84	-104.46	1,109.24	1,042.29	66.95	16.569		
13,600.00	10,571.52	14,947.90	11,682.66	43.94	48.68	-178.92	3,113.11	-103.88	1,112.63	1,044.36	68.27	16.297		
13,700.00	10,571.35	15,045.80	11,684.80	44.35	49.10	-178.92	3,210.99	-103.96	1,114.99	1,045.55	69.44	16.057		
13,800.00	10,571.17	15,165.35	11,686.96	44.78	49.62	-178.91	3,330.52	-104.41	1,117.02	1,046.15	70.87	15.762		
13,900.00	10,571.00	15,265.32	11,687.91	45.21	50.07	-178.87	3,430.48	-105.18	1,118.16	1,046.07	72.09	15.511		
14,000.00	10,570.82	15,384.02	11,687.36	45.65	50.60	-178.79	3,549.16	-106.86	1,117.83	1,044.29	73.54	15.200		
14,100.00	10,570.65	15,491.62	11,686.27	46.11	51.10	-178.73	3,656.75	-108.09	1,117.04	1,042.16	74.88	14.918		
14,200.00	10,570.48	15,596.18	11,684.03	46.57	51.60	-178.64	3,761.27	-110.05	1,115.10	1,038.90	76.20	14.635		
14,300.00	10,570.30	15,707.70	11,681.40	47.03	52.14	-178.51	3,872.72	-112.48	1,112.99	1,035.39	77.61	14.341		
14,400.00	10,570.13	15,808.29	11,678.13	47.51	52.63	-178.38	3,973.23	-115.16	1,109.98	1,031.09	78.90	14.069		
14,500.00	10,569.95	15,897.46	11,675.30	47.99	53.07	-178.25	4,062.32	-117.66	1,107.11	1,027.06	80.05	13.830		
14,560.12	10,569.85	15,935.92	11,674.80	48.29	53.26	-178.21	4,100.77	-118.47	1,106.50	1,025.94	80.56	13.735		
14,600.00	10,569.78	15,960.59	11,674.92	48.48	53.39	-178.20	4,125.44	-118.65	1,106.77	1,025.89	80.89	13.683		
14,700.00	10,569.60	16,042.36	11,676.67	48.98	53.80	-178.25	4,207.18	-117.82	1,109.04	1,027.08	81.96	13.531		
14,800.00	10,569.43	16,132.34	11,680.29	49.48	54.25	-178.39	4,297.05	-115.23	1,113.08	1,029.94	83.15	13.387		
14,900.00	10,569.25	16,228.91	11,684.25	49.99	54.75	-178.57	4,393.48	-112.05	1,117.26	1,032.83	84.43	13.233		
15,000.00	10,569.08	16,331.17	11,688.36	50.51	55.28	-178.73	4,495.61	-109.03	1,121.39	1,035.59	85.79	13.071		
15,100.00	10,568.90	16,440.89	11,692.35	51.04	55.86	-178.97	4,604.98	-104.59	1,125.13	1,037.87	87.26	12.894		
15,200.00	10,568.73	16,565.26	11,694.90	51.57	56.51	-179.17	4,729.45	-100.75	1,127.33	1,038.39	88.94	12.675		
15,300.00	10,568.56	16,684.42	11,694.68	52.10	57.15	-179.30	4,848.58	-98.27	1,127.25	1,036.70	90.55	12.449		
15,400.00	10,568.38	16,781.78	11,694.01	52.64	57.67	-179.40	4,945.92	-96.39	1,126.71	1,034.83	91.88	12.263		
15,500.00	10,568.21	16,891.18	11,693.13	53.19	58.27	-179.51	5,055.30	-94.39	1,126.08	1,032.71	93.38	12.060		

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

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 1H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Reference Site:	Cheddar 2BS Federal Com	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design Cheddar 3BS Federal Com - 1H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 163-MWD+FR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.00	10,568.03	16,998.99	11,690.81	53.74	58.87	-179.58	5,163.07	-93.02	1,124.07	1,029.22	94.85	11.851		
15,700.00	10,567.86	17,086.01	11,689.31	54.30	59.35	-179.64	5,250.08	-91.97	1,122.54	1,026.47	96.07	11.685		
15,800.00	10,567.68	17,182.13	11,688.86	54.86	59.89	-179.68	5,346.19	-91.30	1,122.22	1,024.82	97.41	11.521		
15,900.00	10,567.51	17,292.06	11,687.57	55.43	60.51	-179.71	5,456.12	-90.76	1,121.21	1,022.28	98.93	11.333		
16,000.00	10,567.33	17,385.63	11,686.24	56.00	61.04	-179.80	5,549.66	-89.18	1,119.96	1,019.72	100.25	11.172		
16,100.00	10,567.16	17,490.25	11,685.24	56.58	61.64	-179.92	5,654.25	-88.90	1,119.19	1,017.48	101.71	11.003		
16,200.00	10,566.98	17,581.75	11,684.17	57.16	62.17	-179.97	5,745.74	-88.07	1,118.21	1,015.20	103.01	10.856		
16,234.94	10,566.92	17,611.65	11,684.04	57.37	62.35	-179.97	5,775.63	-85.97	1,118.12	1,014.69	103.43	10.810		
16,300.00	10,566.81	17,664.72	11,684.24	57.75	62.65	-179.98	5,828.70	-85.78	1,118.47	1,014.29	104.18	10.736		
16,400.00	10,566.64	17,737.41	11,685.70	58.34	63.08	-180.00	5,901.38	-85.59	1,120.69	1,015.49	105.20	10.653		
16,500.00	10,566.46	17,848.22	11,688.82	58.93	63.73	179.95	6,012.14	-84.68	1,123.67	1,016.88	106.79	10.523		
16,600.00	10,566.29	17,964.54	11,690.84	59.53	64.43	-179.91	6,128.40	-87.51	1,125.60	1,017.15	108.45	10.379		
16,700.00	10,566.11	18,065.99	11,691.59	60.13	65.03	-179.72	6,229.77	-91.36	1,126.53	1,016.63	109.90	10.251		
16,800.00	10,565.94	18,155.65	11,692.66	60.74	65.57	-179.93	6,319.35	-95.21	1,127.93	1,016.75	111.18	10.145		
16,900.00	10,565.76	18,259.12	11,694.34	61.35	66.20	-179.34	6,422.73	-99.08	1,129.76	1,017.09	112.67	10.027		
17,000.00	10,565.59	18,374.91	11,695.30	61.96	66.91	-179.29	6,538.50	-100.20	1,130.80	1,016.46	114.34	9.890		
17,100.00	10,565.41	18,502.00	11,693.45	62.58	67.69	-179.27	6,665.58	-100.55	1,129.44	1,013.29	116.15	9.724		
17,200.00	10,565.24	18,593.20	11,691.29	63.20	68.25	-179.21	6,756.74	-101.79	1,127.30	1,009.82	117.48	9.596		
17,300.00	10,565.07	18,684.08	11,690.54	63.82	68.81	-179.23	6,847.62	-101.63	1,126.61	1,007.81	118.80	9.483		
17,400.00	10,564.89	18,793.08	11,689.25	64.45	69.48	-179.32	6,956.59	-99.80	1,125.58	1,005.20	120.38	9.350		
17,500.00	10,564.72	18,887.04	11,687.81	65.07	70.07	-179.35	7,050.53	-99.37	1,124.23	1,002.48	121.75	9.234		
17,600.00	10,564.54	18,979.97	11,687.23	65.71	70.65	-179.36	7,143.46	-99.16	1,123.77	1,000.66	123.11	9.128		
17,645.06	10,564.46	19,023.57	11,687.08	65.99	70.92	-179.39	7,187.06	-98.62	1,123.69	999.94	123.75	9.080		
17,700.00	10,564.37	19,070.95	11,687.14	66.34	71.22	-179.45	7,234.43	-97.57	1,123.83	999.39	124.44	9.031		
17,800.00	10,564.19	19,169.98	11,687.82	66.98	71.84	-179.62	7,333.41	-94.32	1,124.67	998.77	125.90	8.933		
17,900.00	10,564.02	19,273.51	11,688.09	67.62	72.49	-179.73	7,436.92	-92.29	1,125.09	997.67	127.42	8.830		
18,000.00	10,563.84	19,381.01	11,687.98	68.26	73.18	-179.73	7,544.41	-92.29	1,125.16	996.16	128.99	8.723		
18,057.96	10,563.74	19,435.33	11,687.75	68.64	73.52	-179.71	7,598.72	-92.75	1,125.02	995.23	129.79	8.668		
18,100.00	10,563.67	19,473.34	11,687.75	68.91	73.77	-179.71	7,636.74	-92.90	1,125.09	994.74	130.35	8.631		
18,200.00	10,563.49	19,575.31	11,687.91	69.56	74.42	-179.77	7,738.70	-91.72	1,125.43	993.57	131.86	8.535		
18,300.00	10,563.32	19,678.92	11,687.76	70.21	75.08	-179.89	7,842.29	-89.45	1,125.45	992.06	133.39	8.437		
18,305.99	10,563.31	19,685.13	11,687.74	70.24	75.12	-179.90	7,848.49	-89.37	1,125.44	991.96	133.48	8.432		
18,400.00	10,563.15	19,769.41	11,687.90	70.86	75.66	-179.98	7,932.76	-87.88	1,125.77	991.04	134.73	8.356		
18,500.00	10,562.97	19,876.55	11,688.11	71.51	76.35	179.91	8,039.88	-85.84	1,126.14	989.82	136.32	8.261		
18,600.00	10,562.80	19,978.67	11,687.84	72.17	77.01	179.85	8,141.99	-84.64	1,126.05	988.22	137.83	8.170		
18,628.80	10,562.75	20,006.19	11,687.77	72.36	77.19	179.83	8,169.51	-84.30	1,126.03	987.80	138.24	8.146		
18,700.00	10,562.62	20,079.50	11,687.68	72.83	77.67	179.76	8,242.81	-83.07	1,126.08	986.75	139.33	8.082		
18,800.00	10,562.45	20,192.90	11,686.52	73.49	78.41	179.72	8,356.20	-82.33	1,125.22	984.22	141.00	7.980		
18,900.00	10,562.27	20,304.36	11,684.26	74.15	79.15	179.76	8,467.63	-83.14	1,123.37	980.73	142.64	7.876		
19,000.00	10,562.10	20,394.68	11,682.21	74.82	79.74	179.78	8,557.92	-83.62	1,121.28	977.29	144.00	7.787		
19,100.00	10,561.92	20,485.18	11,680.78	75.49	80.34	179.78	8,648.41	-83.76	1,119.90	974.55	145.36	7.704		
19,143.37	10,561.85	20,520.80	11,680.59	75.78	80.58	179.77	8,684.03	-83.62	1,119.76	973.86	145.89	7.675		
19,200.00	10,561.75	20,566.75	11,680.74	76.16	80.88	179.74	8,729.98	-83.08	1,120.04	973.46	146.58	7.641		
19,300.00	10,561.57	20,670.39	11,681.34	76.83	81.57	179.68	8,833.61	-82.06	1,120.80	972.67	148.13	7.566		
19,400.00	10,561.40	20,760.98	11,681.81	77.50	82.17	179.68	8,924.20	-82.06	1,121.52	972.04	149.48	7.503		
19,500.00	10,561.23	20,862.02	11,683.49	78.17	82.84	179.72	9,025.21	-82.98	1,123.36	972.37	150.99	7.440		
19,600.00	10,561.05	20,978.98	11,684.02	78.85	83.63	179.82	9,142.15	-85.08	1,123.98	971.23	152.75	7.358		
19,616.65	10,561.02	20,998.70	11,683.94	78.96	83.76	179.84	9,161.87	-85.50	1,123.94	970.90	153.04	7.344		
19,700.00	10,560.88	21,062.57	11,684.25	79.53	84.19	179.94	9,225.71	-87.37	1,124.45	970.46	153.99	7.302		
19,800.00	10,560.70	21,173.77	11,685.34	80.21	84.94	-179.82	9,336.80	-92.21	1,125.64	969.97	155.67	7.231		
19,900.00	10,560.53	21,292.34	11,684.49	80.89	85.74	-179.51	9,455.20	-98.53	1,125.13	967.69	157.43	7.147		
20,000.00	10,560.35	21,404.17	11,682.15	81.57	86.51	-179.19	9,566.82	-104.90	1,123.26	964.17	159.09	7.061		

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

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Cheddar 2BS Federal Com
Site Error: 0.00 usft
Reference Well: 1H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

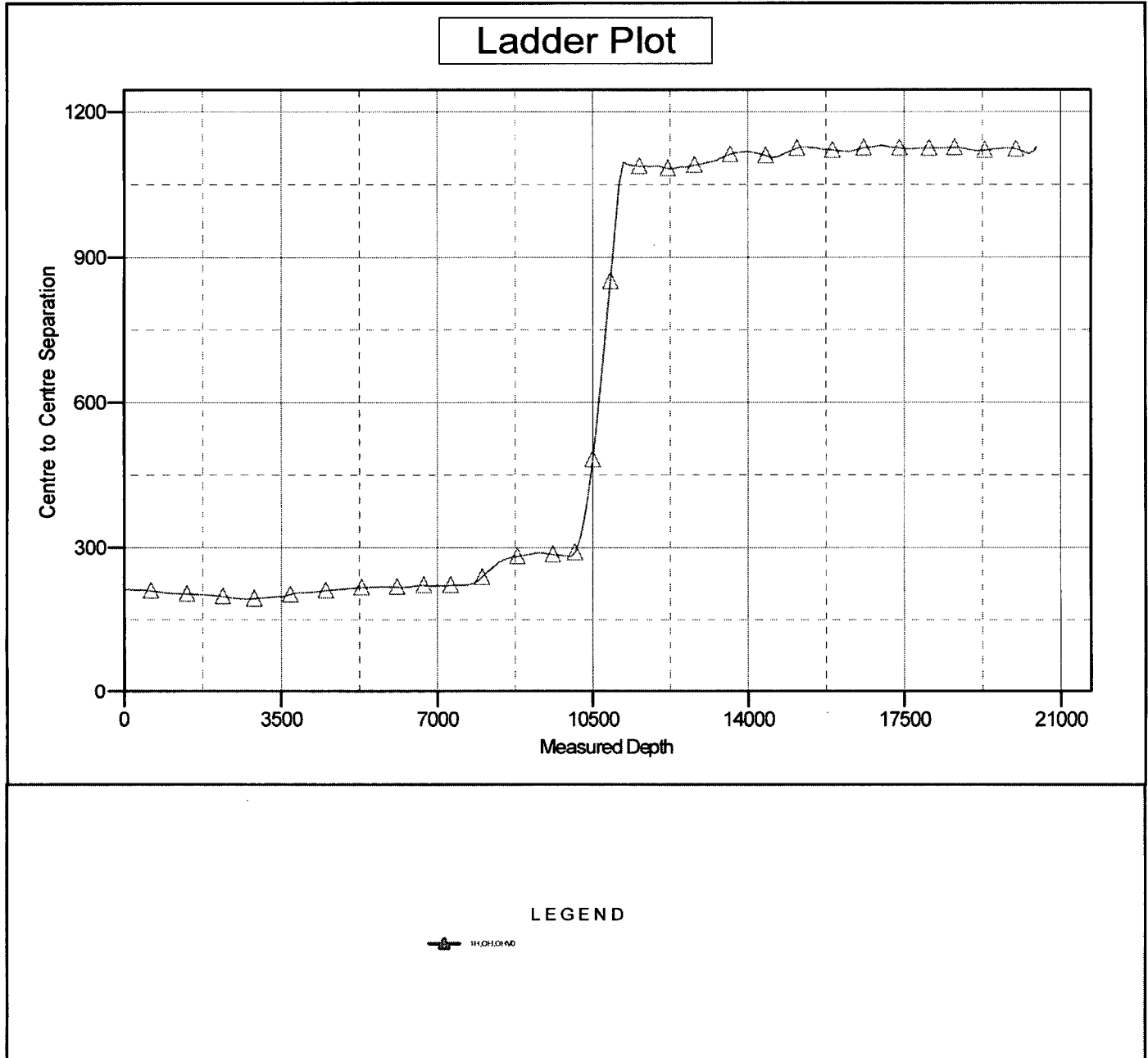
Local Co-ordinate Reference: Well 1H
TVD Reference: KB=25' @ 3690.00usft (H&P 650)
MD Reference: KB=25' @ 3690.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.14 Single User Db
Offset TVD Reference: Offset Datum

Offset Design Cheddar 3BS Federal Com - 1H - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 163-MVD+IFR1+MS													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
20,100.00	10,560.18	21,514.81	11,678.80	82.26	87.27	-178.79	9,677.12	-112.75	1,120.53	959.81	160.72	6.972		
20,200.00	10,560.00	21,623.69	11,674.34	82.94	88.02	-178.30	9,785.50	-122.32	1,116.81	954.49	162.32	6.880		
20,289.91	10,559.85	21,669.00	11,672.32	83.56	88.33	-178.08	9,830.56	-126.58	1,114.10	951.01	163.09	6.831		
20,300.00	10,559.83	21,669.00	11,672.32	83.63	88.33	-178.08	9,830.56	-126.58	1,114.15	951.06	163.09	6.832		
20,400.00	10,559.65	21,669.00	11,672.32	84.32	88.33	-178.08	9,830.56	-126.58	1,119.53	957.00	162.53	6.888		
20,465.50	10,559.54	21,669.00	11,672.32	84.67	88.33	-178.08	9,830.56	-126.58	1,127.85	965.83	162.03	6.961		

Company:	Centennial Resource Development, Inc.	Local Co-ordinate Reference:	Well 1H
Project:	Lea Co., NM (NAD83)	TVD Reference:	KB=25' @ 3690.00usft (H&P 650)
Reference Site:	Cheddar 2BS Federal Com	MD Reference:	KB=25' @ 3690.00usft (H&P 650)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	1H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.14 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=25' @ 3690.00usft (H&P 650)
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: 1H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.34°



Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Reference Site: Cheddar 2BS Federal Com
Site Error: 0.00 usft
Reference Well: 1H
Well Error: 0.00 usft
Reference Wellbore: OH
Reference Design: Plan #1

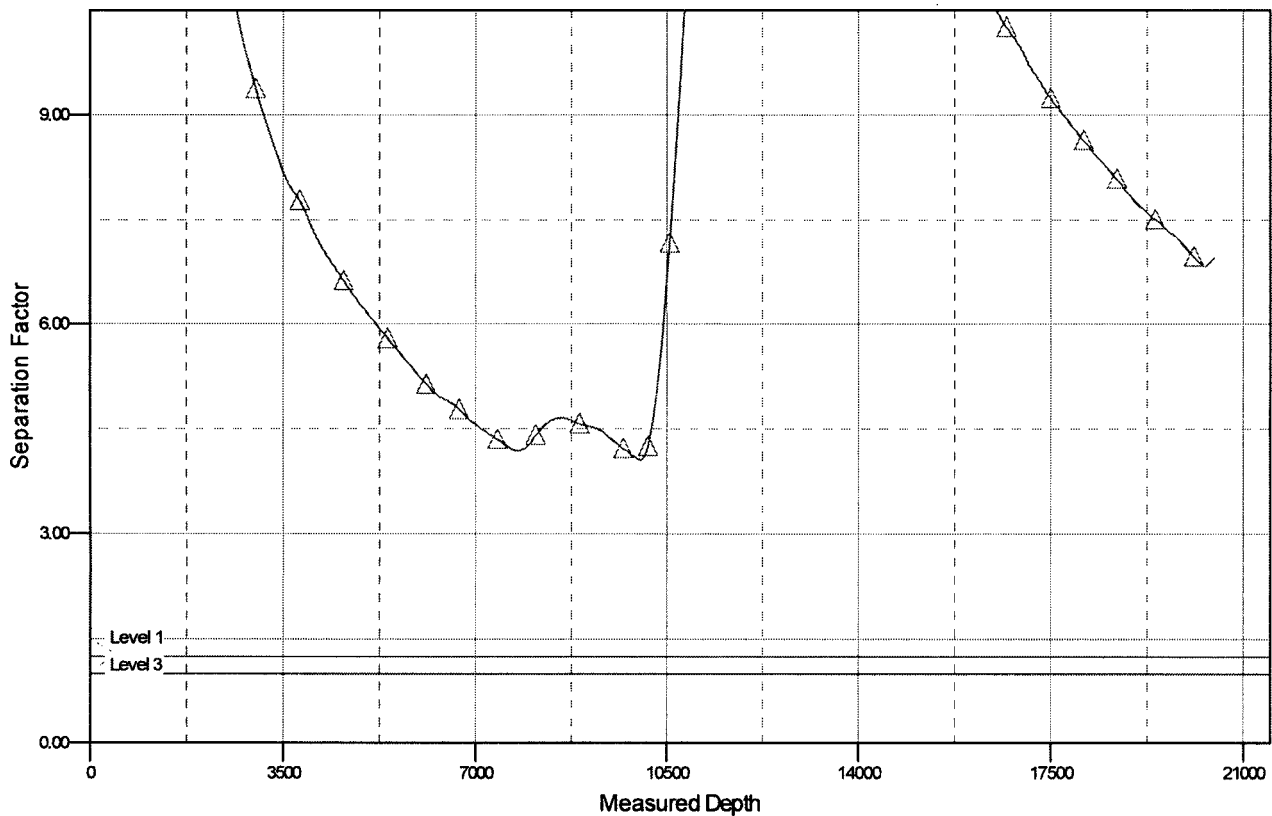
Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Output errors are at
Database:
Offset TVD Reference:

Well 1H
KB=25' @ 3690.00usft (H&P 650)
KB=25' @ 3690.00usft (H&P 650)
True
Minimum Curvature
2.00 sigma
EDM 5000.14 Single User Db
Offset Datum

Reference Depths are relative to KB=25' @ 3690.00usft (H&P 650)
Offset Depths are relative to Offset Datum
Central Meridian is -104.333334

Coordinates are relative to: 1H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.34°

Separation Factor Plot



LEGEND

1H, OH, OHMD