

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

CAMENISCH 19-2-9F pad

Camenisch 12-2

Camenisch 12-2

Plan: Camenisch 12-2 (wp01)


Standard Planning Report

26 September, 2011

Project: COLORADO NORTHERN ZONE - 83
Site: CAMENISCH 19-2-9F pad
Well: Camenisch 12-2
Wellbore: Camenisch 12-2
Section:
SHL:
Design: Camenisch 12-2 (wp01)
Latitude: 40.075613
Longitude: -104.863678
GL: 5032.00
KB: 15' RKB + 5032' GL @ 5047.00ft

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4132.00	4291.87	PK
4592.00	4751.87	SX
7312.00	7471.87	NIO
7622.00	7781.87	CD
7710.00	7869.87	GH
8062.00	8221.87	J

CASING DETAILS
No casing data is available



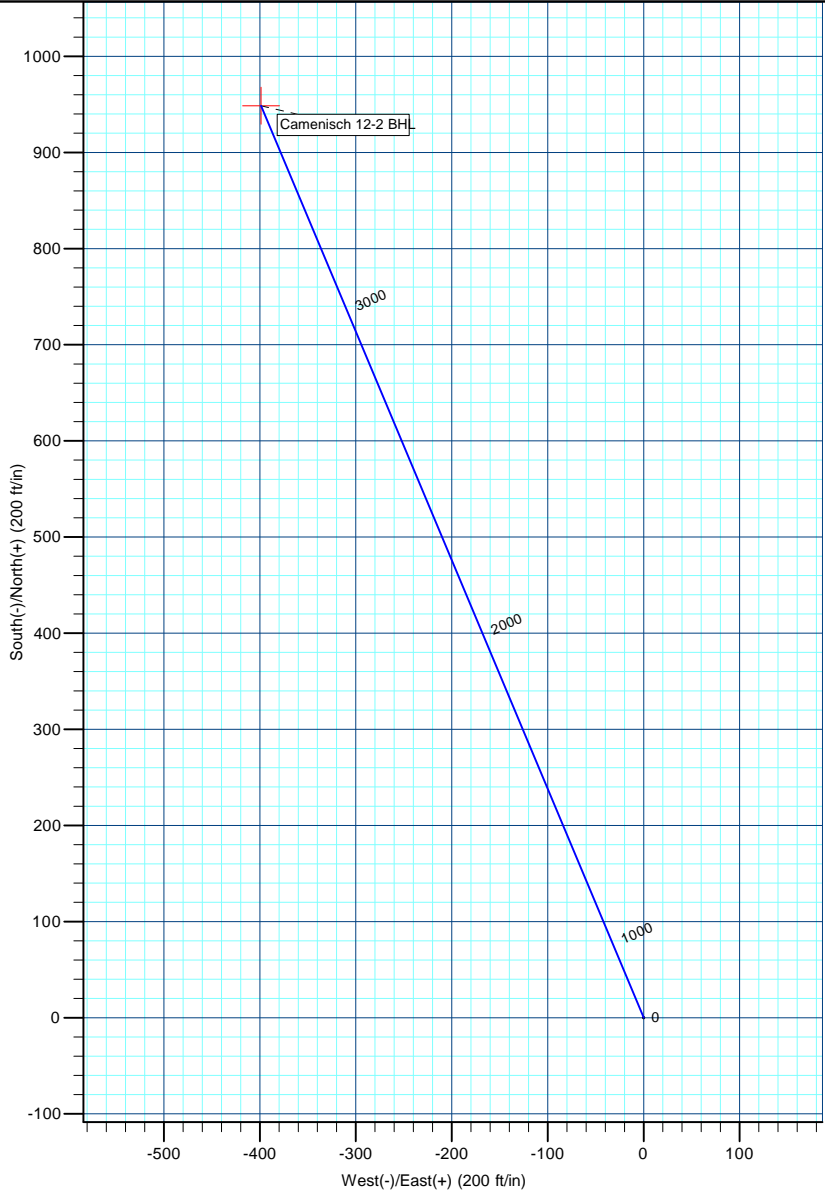
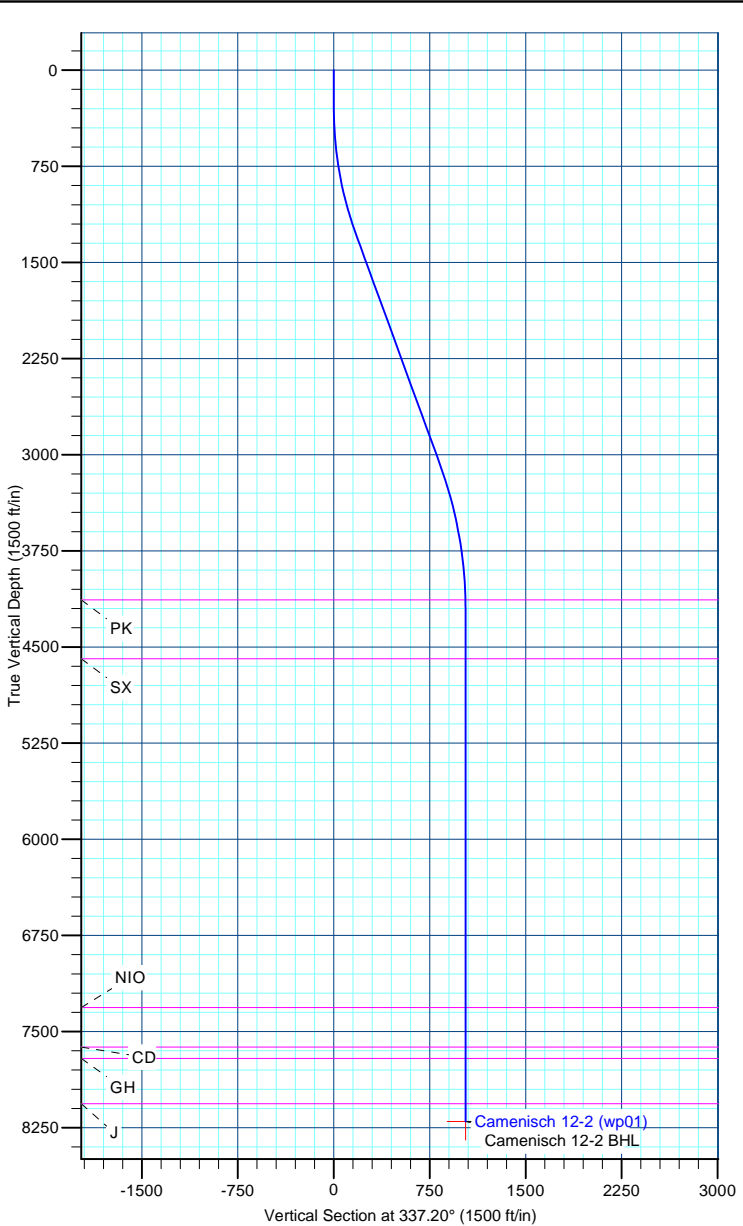
Azimuths to True North
Magnetic North: 8.85°

Magnetic Field
Strength: 52918.4snT
Dip Angle: 66.76°
Date: 9/26/2011
Model: IGRF2010

WELL DETAILS: Camenisch 12-2						
+N/-S	+E/-W	Northing	Ground Level: Easting	5032.00 Latitude	Longitude	Slot
0.00	0.00	1271029.67	3178068.71	40.075613	-104.863678	

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
Camenisch 12-2 BHL	8202.00	948.59	-398.76	1271975.38	3177663.16	40.078217	-104.865103	

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.00	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
1303.89	20.08	337.20	1283.47	160.50	-67.47	2.00	337.20	174.10
3214.57	20.08	337.20	3078.03	765.17	-321.66	0.00	0.00	830.03
4361.87	0.00	0.00	4202.00	948.59	-398.76	1.75	180.00	1029.00
8361.87	0.00	0.00	8202.00	948.59	-398.76	0.00	0.00	1029.00



Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Camenisch 12-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' RKB + 5032' GL @ 5047.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' RKB + 5032' GL @ 5047.00ft
Site:	CAMENISCH 19-2-9F pad	North Reference:	True
Well:	Camenisch 12-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Camenisch 12-2		
Design:	Camenisch 12-2 (wp01)		

Project	COLORADO NORTHERN ZONE - 83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	CAMENISCH 19-2-9F pad			
Site Position:		Northing:	1,271,059.92 usft	Latitude: 40.075696
From:	Lat/Long	Easting:	3,178,068.22 usft	Longitude: -104.863679
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence: 0.41 °

Well	Camenisch 12-2			
Well Position	+N/-S	-30.25 ft	Northing:	1,271,029.67 usft
	+E/-W	0.28 ft	Easting:	3,178,068.71 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 5,032.00 ft

Wellbore	Camenisch 12-2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/26/2011	8.85	66.76	52,918

Design	Camenisch 12-2 (wp01)			
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	337.20

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,303.89	20.08	337.20	1,283.47	160.50	-67.47	2.00	2.00	0.00	337.20	
3,214.57	20.08	337.20	3,078.03	765.17	-321.66	0.00	0.00	0.00	0.00	
4,361.87	0.00	0.00	4,202.00	948.59	-398.76	1.75	-1.75	0.00	180.00	
8,361.87	0.00	0.00	8,202.00	948.59	-398.76	0.00	0.00	0.00	0.00	Camenisch 12-2 BHL

Anadarko Petroleum Corp

Planning Report

Database:	edmp	Local Co-ordinate Reference:	Well Camenisch 12-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' RKB + 5032' GL @ 5047.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' RKB + 5032' GL @ 5047.00ft
Site:	CAMENISCH 19-2-9F pad	North Reference:	True
Well:	Camenisch 12-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Camenisch 12-2		
Design:	Camenisch 12-2 (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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	2.00	337.20	399.98	1.61	-0.68	1.75	2.00	2.00	0.00
500.00	4.00	337.20	499.84	6.43	-2.70	6.98	2.00	2.00	0.00
600.00	6.00	337.20	599.45	14.47	-6.08	15.69	2.00	2.00	0.00
700.00	8.00	337.20	698.70	25.70	-10.80	27.88	2.00	2.00	0.00
800.00	10.00	337.20	797.47	40.12	-16.87	43.52	2.00	2.00	0.00
900.00	12.00	337.20	895.62	57.71	-24.26	62.60	2.00	2.00	0.00
1,000.00	14.00	337.20	993.06	78.45	-32.98	85.10	2.00	2.00	0.00
1,100.00	16.00	337.20	1,089.64	102.31	-43.01	110.98	2.00	2.00	0.00
1,200.00	18.00	337.20	1,185.27	129.26	-54.34	140.21	2.00	2.00	0.00
1,300.00	20.00	337.20	1,279.82	159.27	-66.95	172.77	2.00	2.00	0.00
1,303.89	20.08	337.20	1,283.47	160.50	-67.47	174.10	2.00	2.00	0.00
1,400.00	20.08	337.20	1,373.74	190.91	-80.25	207.09	0.00	0.00	0.00
1,500.00	20.08	337.20	1,467.66	222.56	-93.56	241.42	0.00	0.00	0.00
1,600.00	20.08	337.20	1,561.58	254.21	-106.86	275.75	0.00	0.00	0.00
1,700.00	20.08	337.20	1,655.51	285.85	-120.16	310.08	0.00	0.00	0.00
1,800.00	20.08	337.20	1,749.43	317.50	-133.47	344.41	0.00	0.00	0.00
1,900.00	20.08	337.20	1,843.35	349.15	-146.77	378.74	0.00	0.00	0.00
2,000.00	20.08	337.20	1,937.28	380.79	-160.08	413.07	0.00	0.00	0.00
2,100.00	20.08	337.20	2,031.20	412.44	-173.38	447.40	0.00	0.00	0.00
2,200.00	20.08	337.20	2,125.12	444.09	-186.68	481.73	0.00	0.00	0.00
2,300.00	20.08	337.20	2,219.04	475.74	-199.99	516.06	0.00	0.00	0.00
2,400.00	20.08	337.20	2,312.97	507.38	-213.29	550.39	0.00	0.00	0.00
2,500.00	20.08	337.20	2,406.89	539.03	-226.59	584.72	0.00	0.00	0.00
2,600.00	20.08	337.20	2,500.81	570.68	-239.90	619.05	0.00	0.00	0.00
2,700.00	20.08	337.20	2,594.73	602.32	-253.20	653.38	0.00	0.00	0.00
2,800.00	20.08	337.20	2,688.66	633.97	-266.50	687.71	0.00	0.00	0.00
2,900.00	20.08	337.20	2,782.58	665.62	-279.81	722.04	0.00	0.00	0.00
3,000.00	20.08	337.20	2,876.50	697.27	-293.11	756.37	0.00	0.00	0.00
3,100.00	20.08	337.20	2,970.43	728.91	-306.41	790.70	0.00	0.00	0.00
3,200.00	20.08	337.20	3,064.35	760.56	-319.72	825.03	0.00	0.00	0.00
3,214.57	20.08	337.20	3,078.03	765.17	-321.66	830.03	0.00	0.00	0.00
3,300.00	18.58	337.20	3,158.64	791.24	-332.61	858.31	1.75	-1.75	0.00
3,400.00	16.83	337.20	3,253.90	819.28	-344.40	888.72	1.75	-1.75	0.00
3,500.00	15.08	337.20	3,350.05	844.62	-355.05	916.21	1.75	-1.75	0.00
3,600.00	13.33	337.20	3,446.98	867.25	-364.56	940.76	1.75	-1.75	0.00
3,700.00	11.58	337.20	3,544.63	887.13	-372.92	962.33	1.75	-1.75	0.00
3,800.00	9.83	337.20	3,642.88	904.26	-380.12	980.91	1.75	-1.75	0.00
3,900.00	8.08	337.20	3,741.66	918.61	-386.16	996.48	1.75	-1.75	0.00
4,000.00	6.33	337.20	3,840.86	930.18	-391.02	1,009.02	1.75	-1.75	0.00
4,100.00	4.58	337.20	3,940.41	938.95	-394.71	1,018.53	1.75	-1.75	0.00
4,200.00	2.83	337.20	4,040.19	944.91	-397.21	1,025.00	1.75	-1.75	0.00
4,291.87	1.23	337.20	4,132.00	947.90	-398.47	1,028.25	1.75	-1.75	0.00
PK									
4,300.00	1.08	337.20	4,140.13	948.06	-398.54	1,028.42	1.75	-1.75	0.00
4,361.87	0.00	0.00	4,202.00	948.59	-398.76	1,029.00	1.75	-1.75	0.00
4,400.00	0.00	0.00	4,240.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,340.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,440.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,540.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
4,751.87	0.00	0.00	4,592.00	948.59	-398.76	1,029.00	0.00	0.00	0.00

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Planning Report

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Well:	Camenisch 12-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Camenisch 12-2		
Design:	Camenisch 12-2 (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
SX									
4,800.00	0.00	0.00	4,640.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,740.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,000.00	0.00	0.00	4,840.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,100.00	0.00	0.00	4,940.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,040.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,140.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,240.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,340.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,440.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,540.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,640.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,740.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,000.00	0.00	0.00	5,840.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,100.00	0.00	0.00	5,940.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,040.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,140.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,240.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,340.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,440.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,540.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,640.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,740.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,000.00	0.00	0.00	6,840.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,100.00	0.00	0.00	6,940.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,040.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,140.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,240.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,471.87	0.00	0.00	7,312.00	948.59	-398.76	1,029.00	0.00	0.00	0.00
NIO									
7,500.00	0.00	0.00	7,340.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,440.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,540.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,781.87	0.00	0.00	7,622.00	948.59	-398.76	1,029.00	0.00	0.00	0.00
CD									
7,800.00	0.00	0.00	7,640.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
7,869.87	0.00	0.00	7,710.00	948.59	-398.76	1,029.00	0.00	0.00	0.00
GH									
7,900.00	0.00	0.00	7,740.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
8,000.00	0.00	0.00	7,840.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
8,100.00	0.00	0.00	7,940.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,040.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
8,221.87	0.00	0.00	8,062.00	948.59	-398.76	1,029.00	0.00	0.00	0.00
J									
8,300.00	0.00	0.00	8,140.13	948.59	-398.76	1,029.00	0.00	0.00	0.00
8,361.87	0.00	0.00	8,202.00	948.59	-398.76	1,029.00	0.00	0.00	0.00
Camenisch 12-2 BHL									

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Database:	edmp	Local Co-ordinate Reference:	Well Camenisch 12-2
Company:	US ROCKIES REGION PLANNING	TVD Reference:	15' RKB + 5032' GL @ 5047.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	15' RKB + 5032' GL @ 5047.00ft
Site:	CAMENISCH 19-2-9F pad	North Reference:	True
Well:	Camenisch 12-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Camenisch 12-2		
Design:	Camenisch 12-2 (wp01)		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
Camenisch 12-2 BHL	0.00	0.00	8,202.00	948.59	-398.76	1,271,975.38	3,177,663.16	40.078217	-104.865103
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
4,291.87	4,132.00	PK				
4,751.87	4,592.00	SX				
7,471.87	7,312.00	NIO		0.00		
7,781.87	7,622.00	CD				
7,869.87	7,710.00	GH				
8,221.87	8,062.00	J				