



Scale 1:240 (5"=100') Metric  
Measured Depth Log

Well Name: COPRC MIRROR LAKE P-20  
Location: UWID: 300P206500126450 ; Surf. Loc: UNIT P-20 GRID 65-00 126-45  
License Number: EL 470, ID# 2081 Region: Norman Wells  
Spud Date: Jan 29, 2014 00:01hrs Drilling Completed: Feb 13, 2014 09:05hrs  
Surface Coordinates: Lat / Long: N 64° 59' 57.98372", W 126° 47' 8.73410"  
Grid N/E Y/X: N 7210027.780 m, E 604406.010 m  
Bottom Hole Coordinates: 64.61m North 231.69m West of Well Center  
Grid N/E Y/X: N 7210084.220m, E 604172.260m  
Ground Elevation (m): 284.15 K.B. Elevation (m): 289.35  
Logged Interval (m): 0 To: 2131 Total Depth (m): 2152  
Formation: Lower Canol Fm  
Type of Drilling Fluid: Gel Chem ( Surface ) Invert VersaClean C12 ( Build; Lateral )  
Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

#### OPERATOR

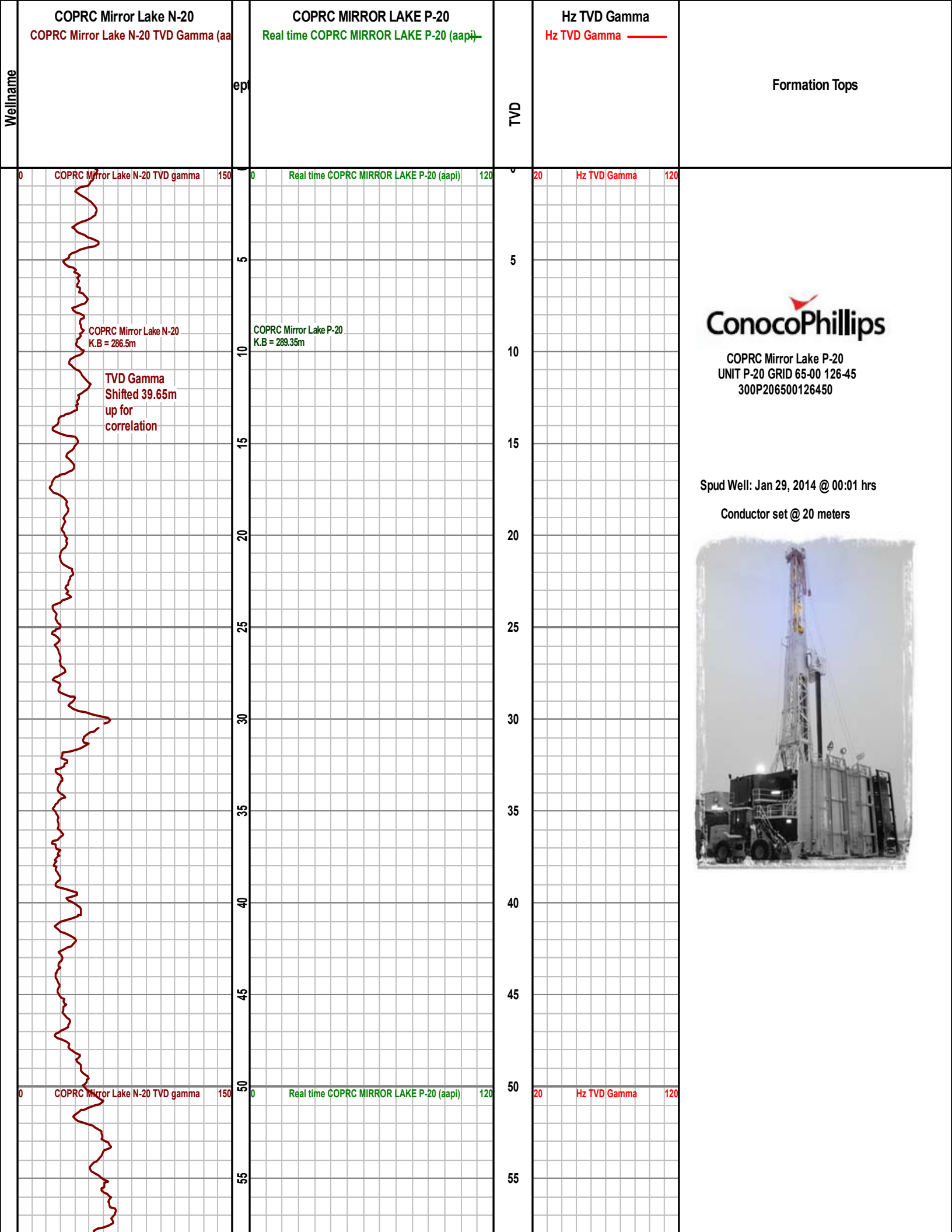
Company: ConocoPhillips  
Address: 2100, 401- 9 Ave SW  
Calgary, Alberta  
T2P 2H7

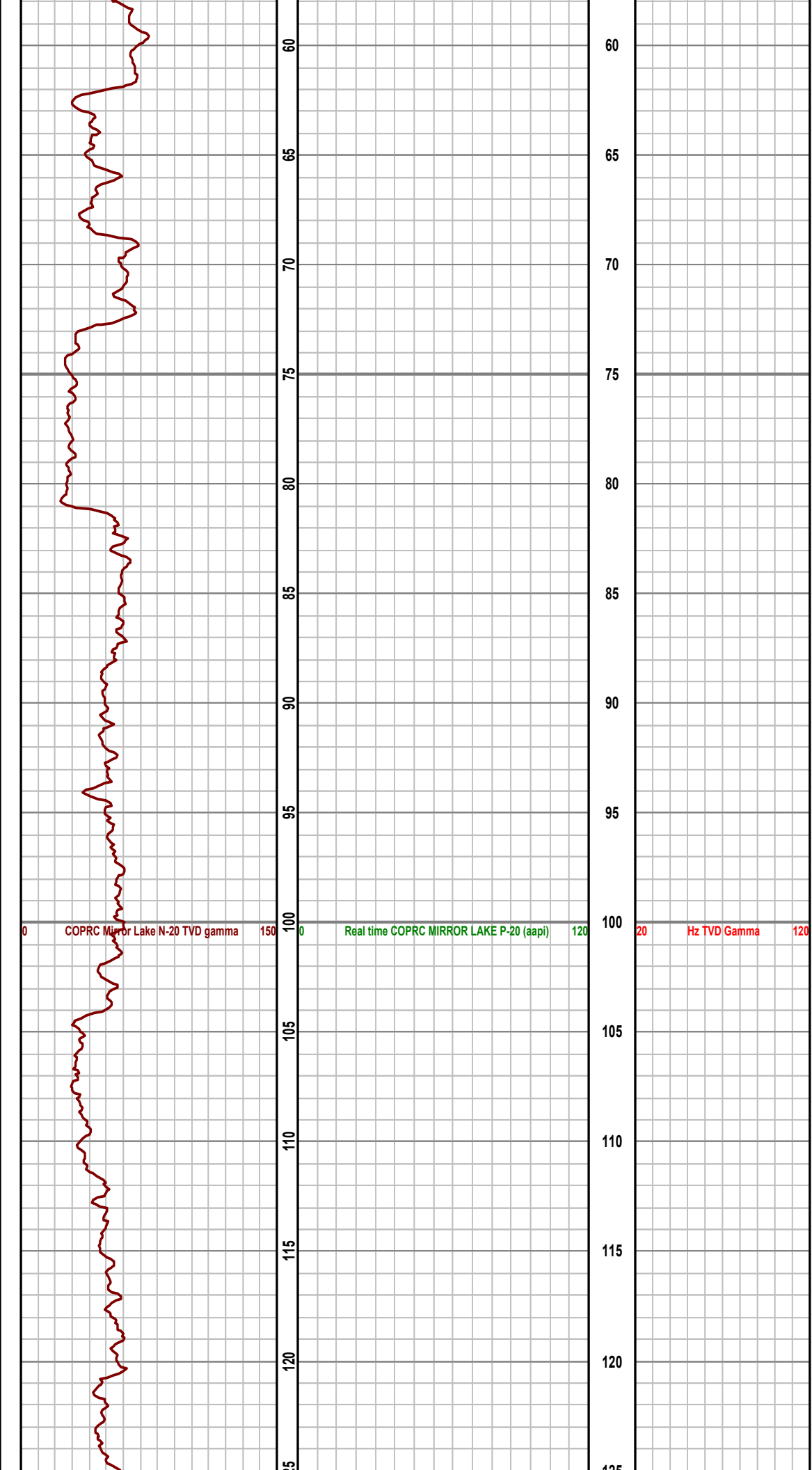
#### GEOLOGIST

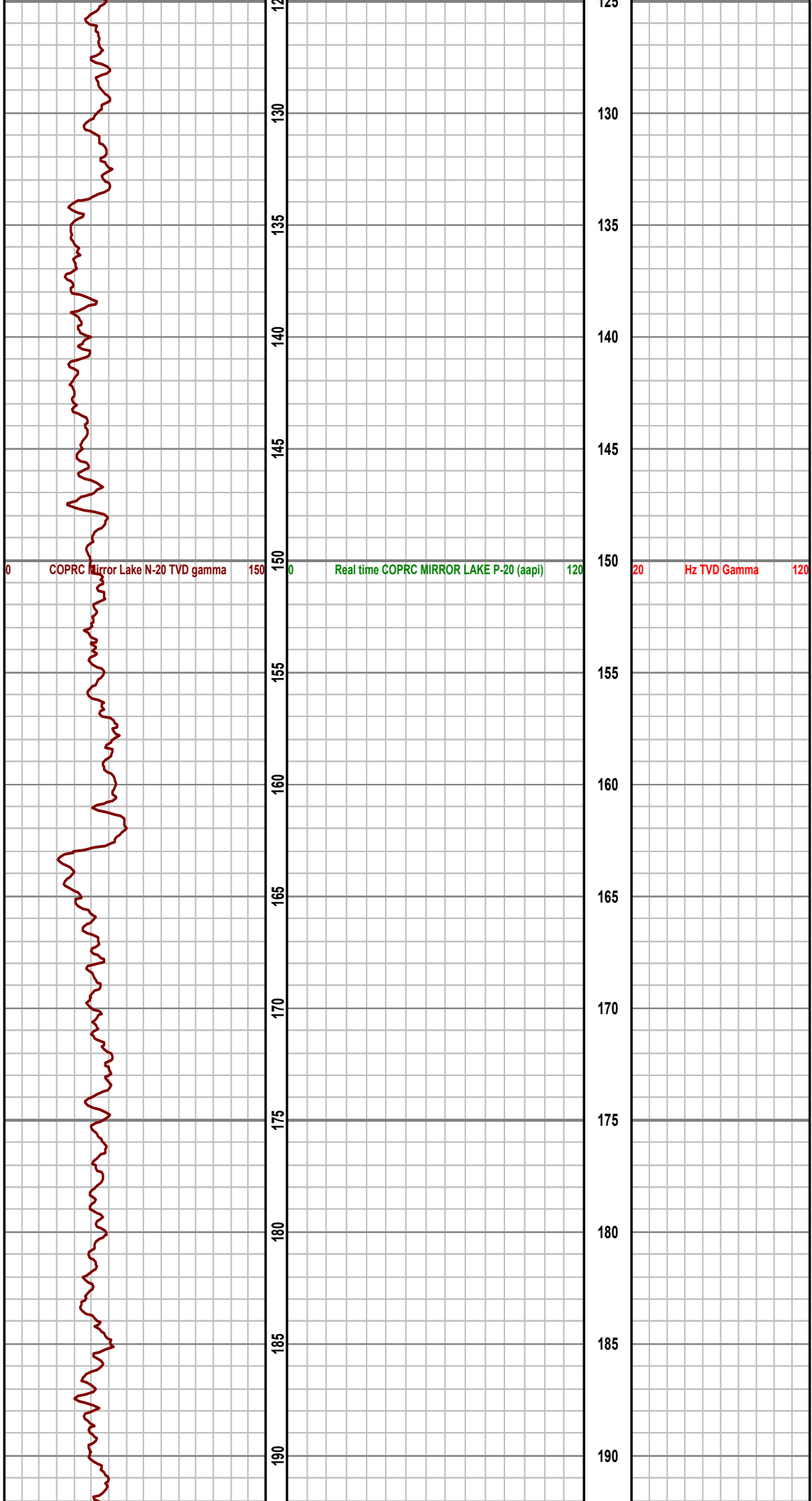
Name: Dave Lawrence; Gerald Pasveer  
Company: Black Gold Geotechnical Services LTD.  
Address: 2009 Colville Road  
Route 9  
New Haven PE

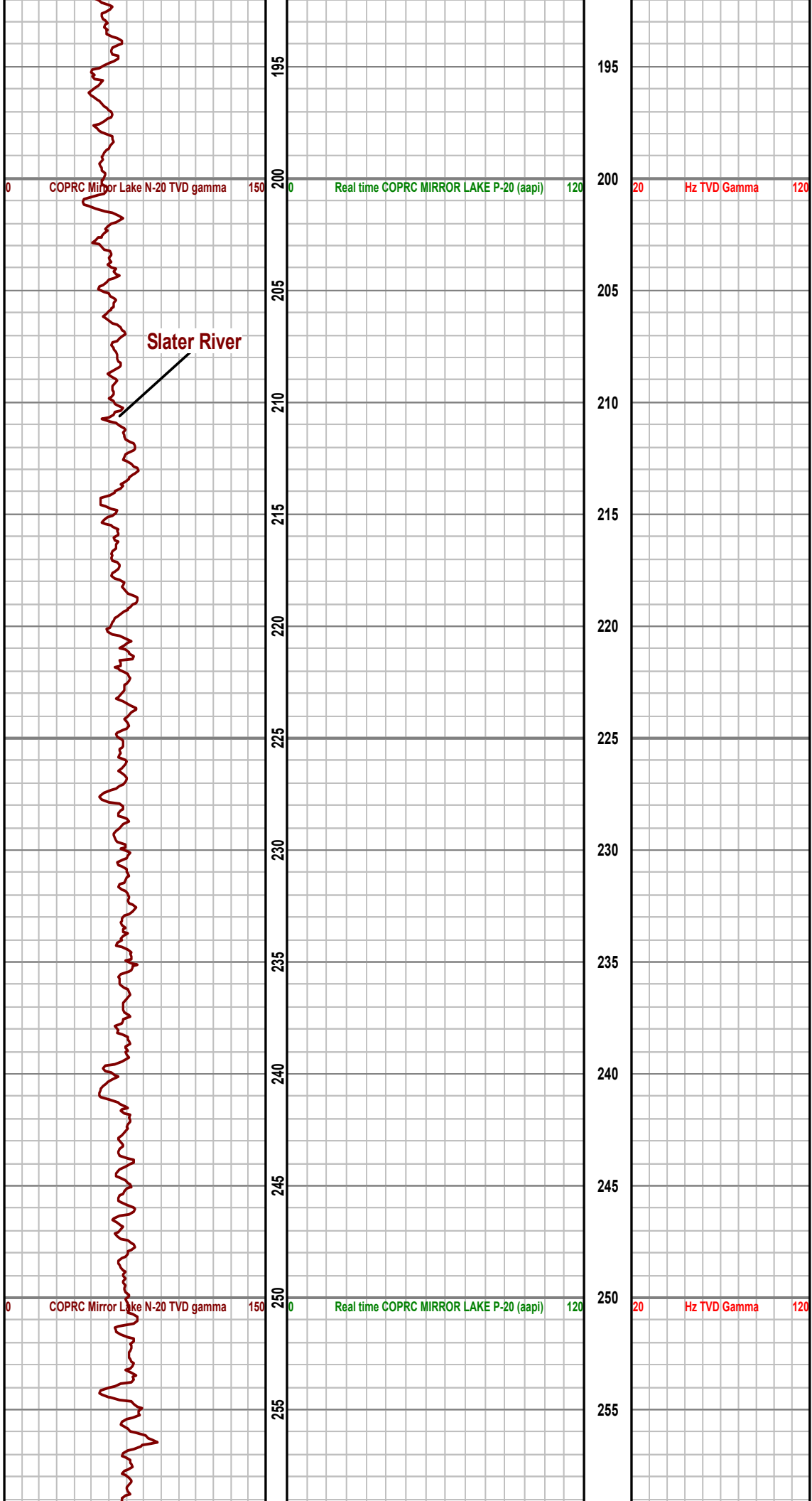
#### Comments

Samples from: 0m to 3152mMD (Build and Lateral), washed and vialled for Operator and NEB & NWT at 5m intervals;  
AFE#: 10351812  
Drilling Rig: Beaver #2  
Drilling Supervisor: Richard Turgeon; Dave Oper  
Gas Detection: MD Totco Gas Analyzer  
Geological Services: David Lawrence; Black Gold Geotechnical Services LTD.  
Gerry Pasveer; Coromandel Resources LTD.  
Directional Services: Sperry Drilling Services  
MWD Services: Extreme Engineering Services  
Wireline Logs: Schlumberger (Vertical into Build)

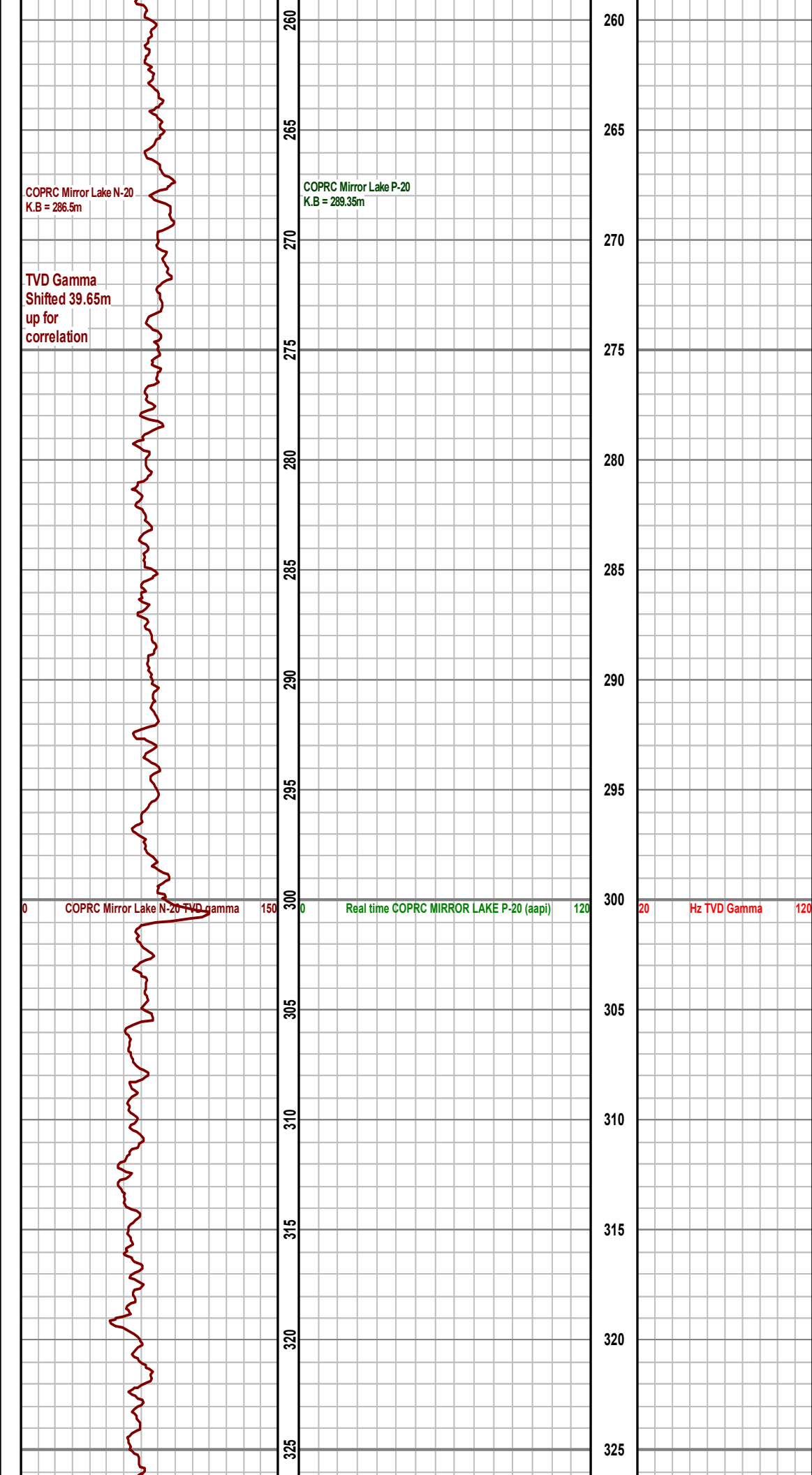


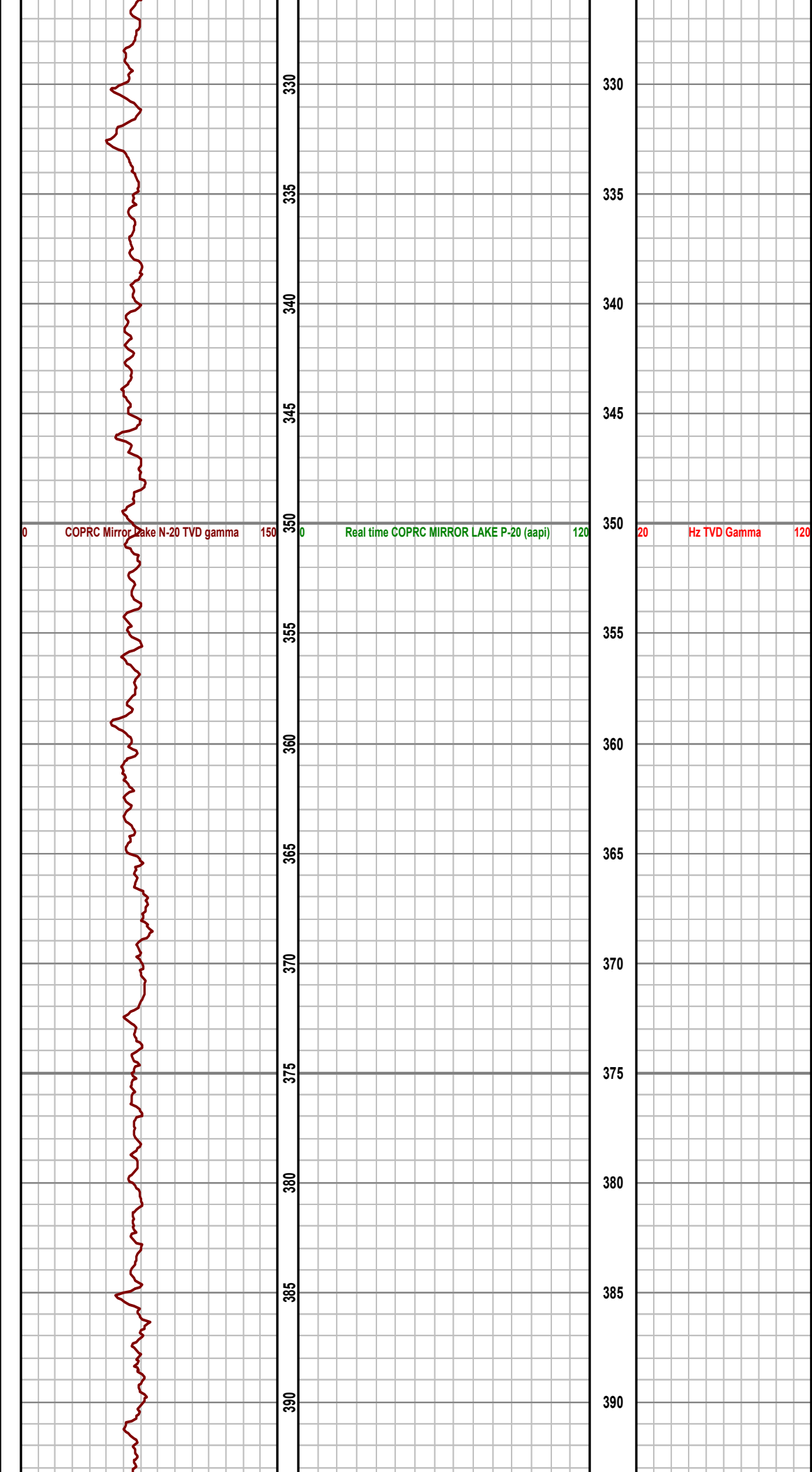


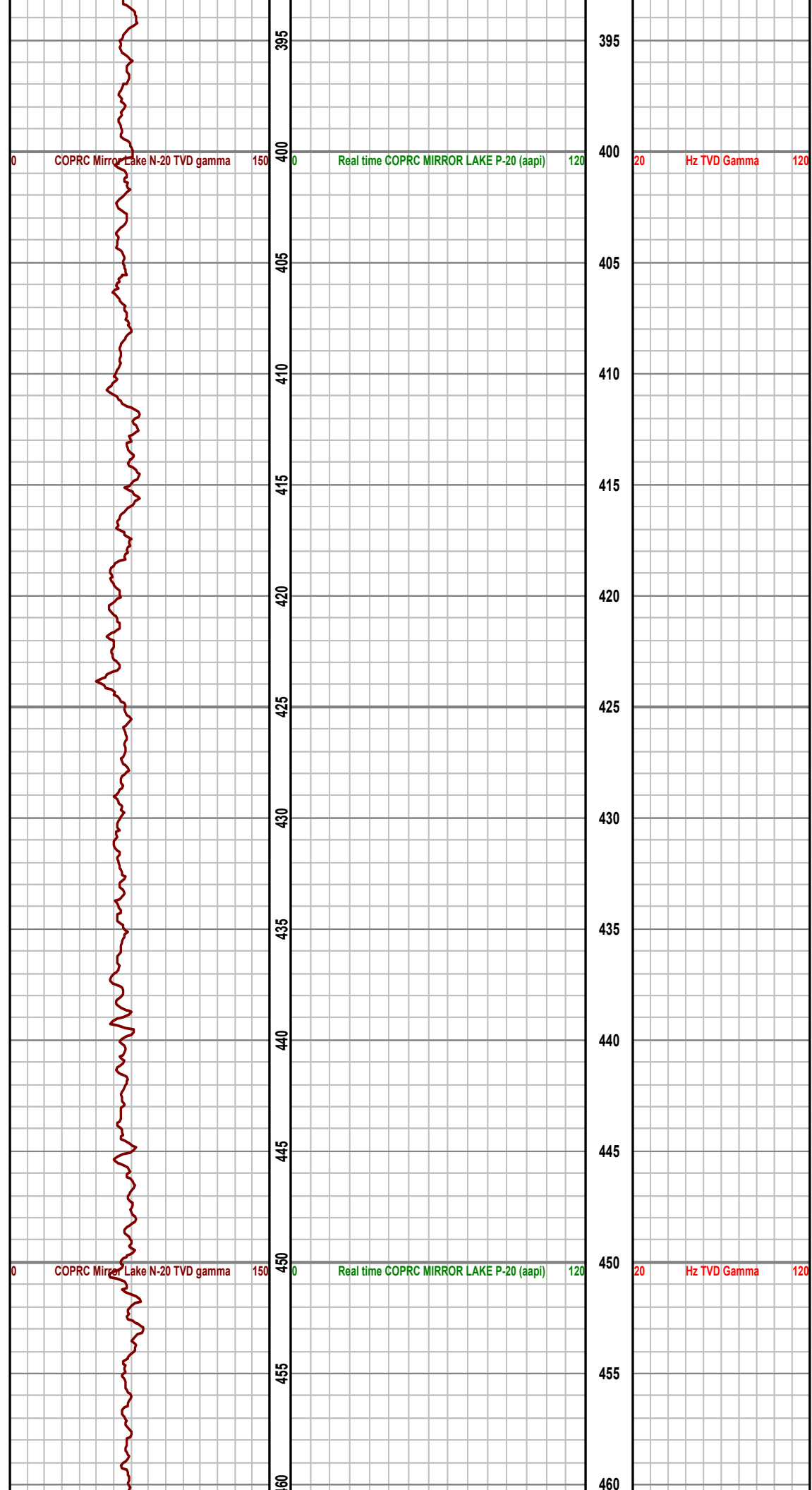


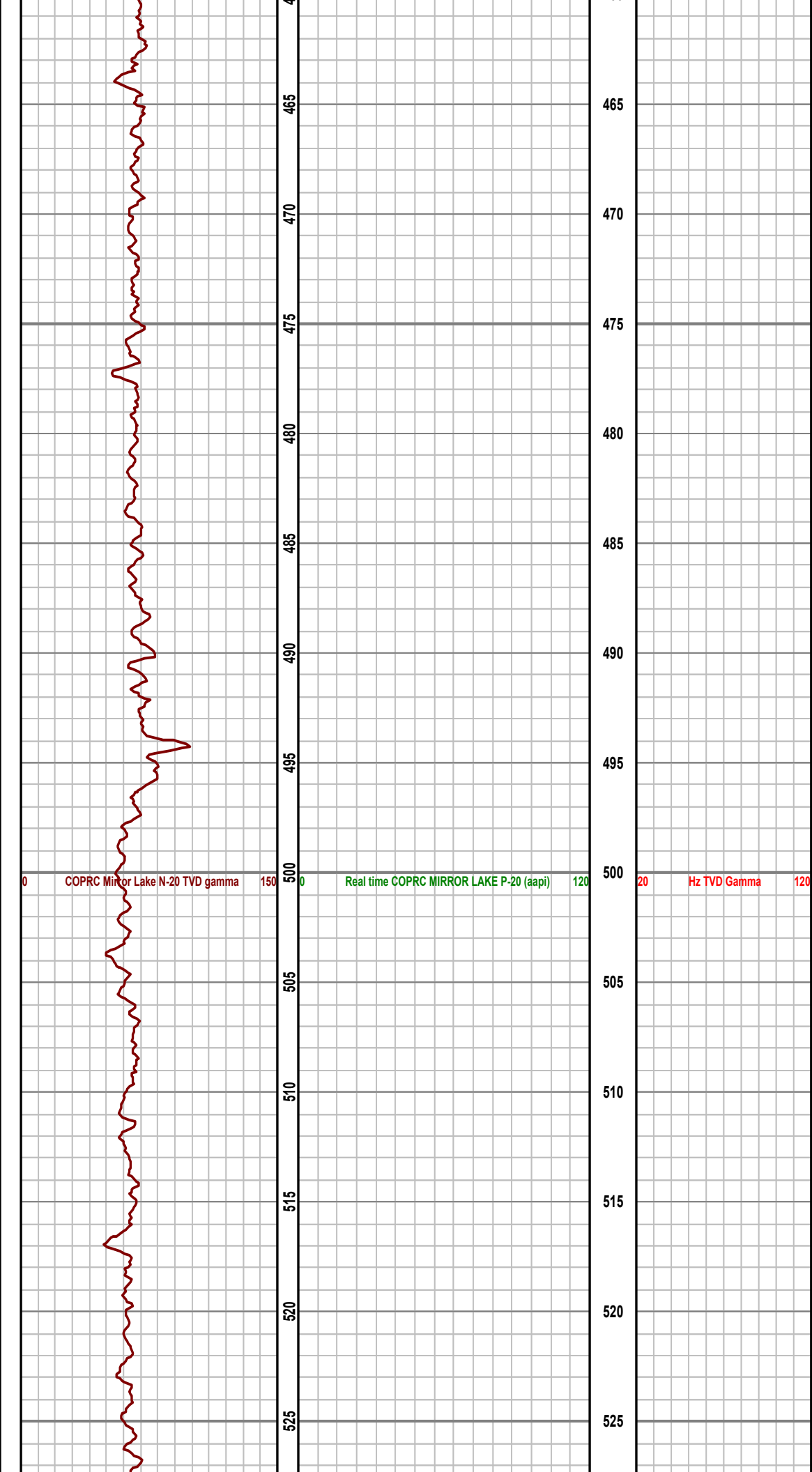


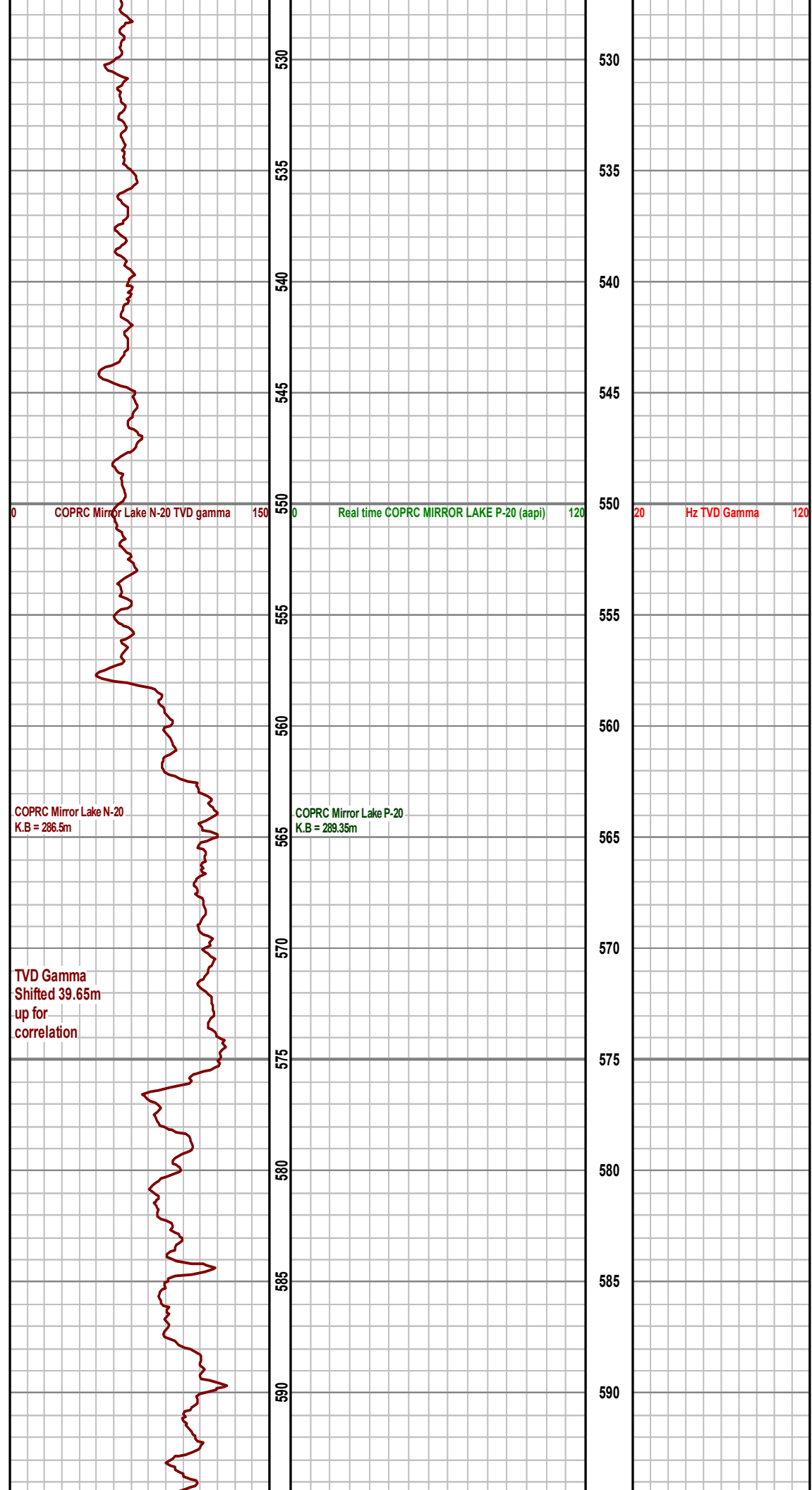
( Prog ): Slater River  
197.35 mMD ( 197.35mTVD, 92.00mSS.)

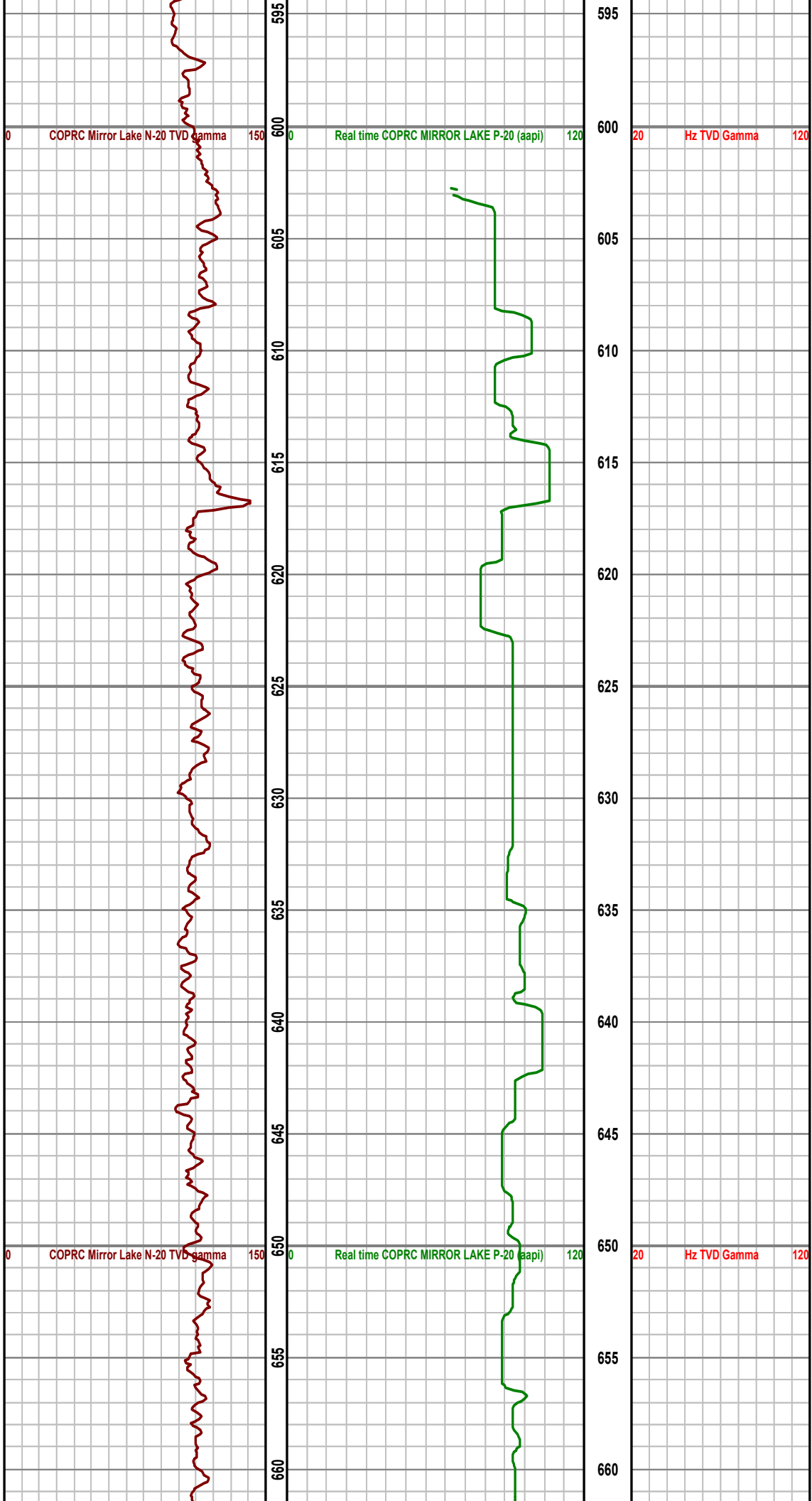


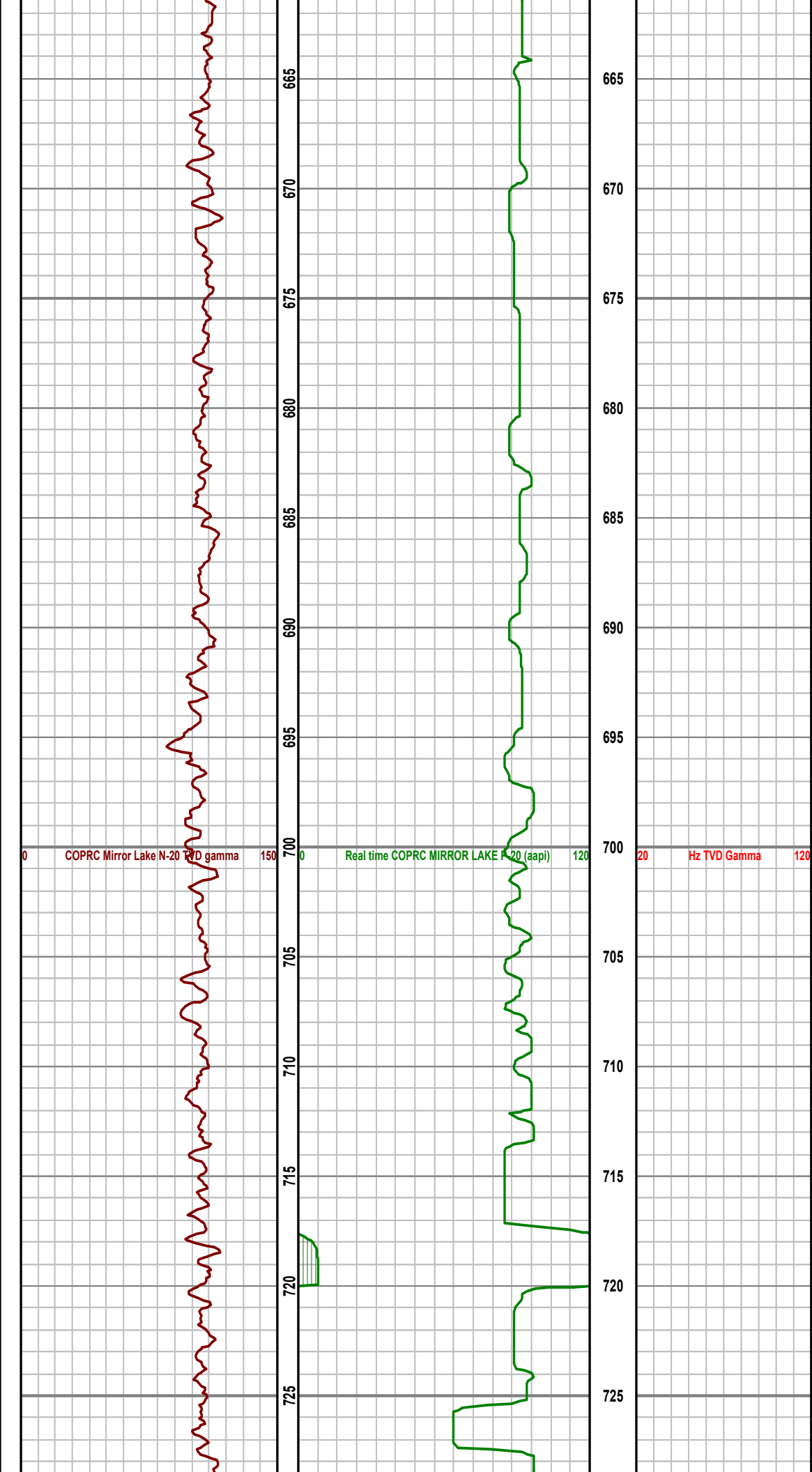


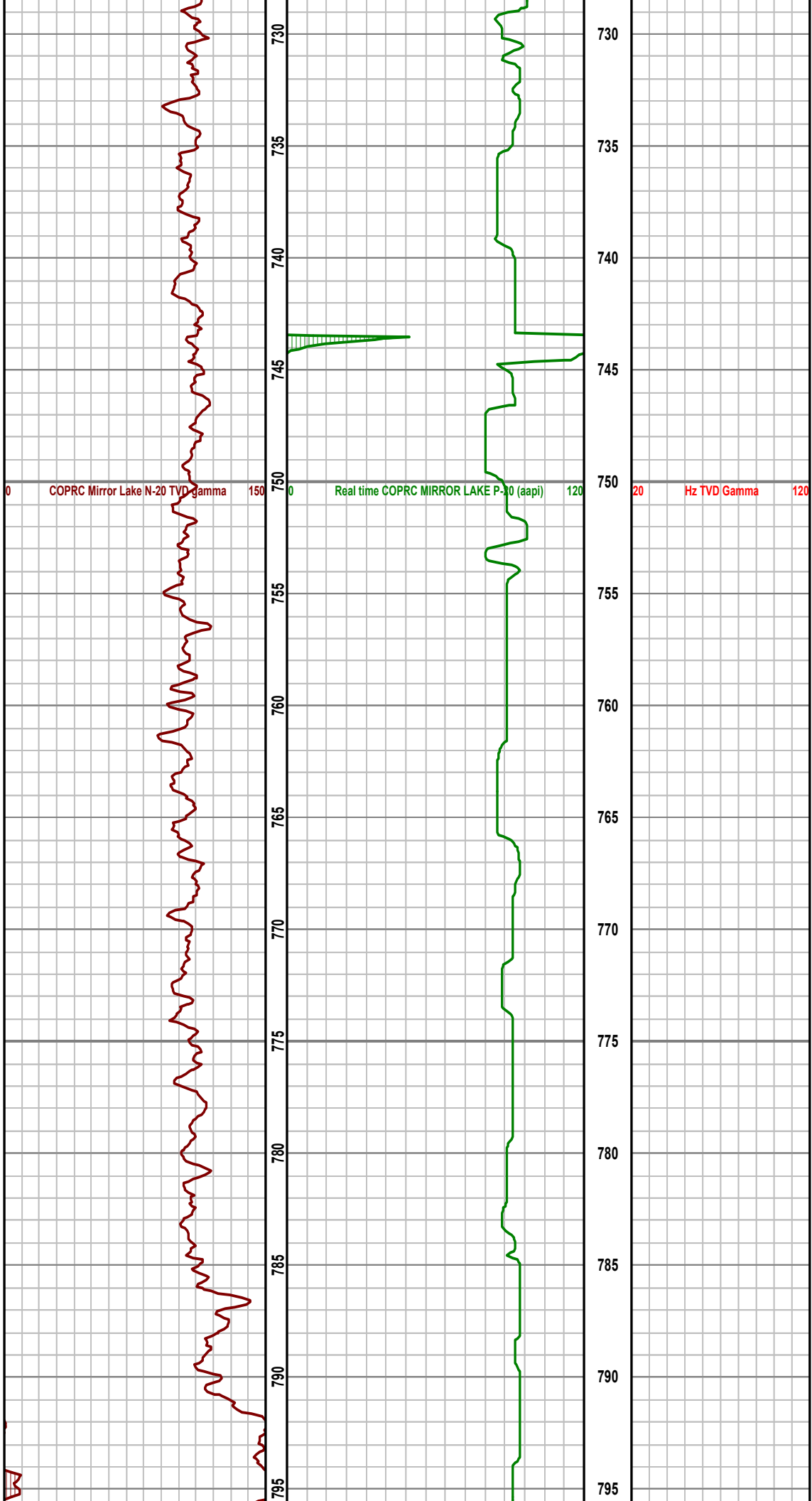


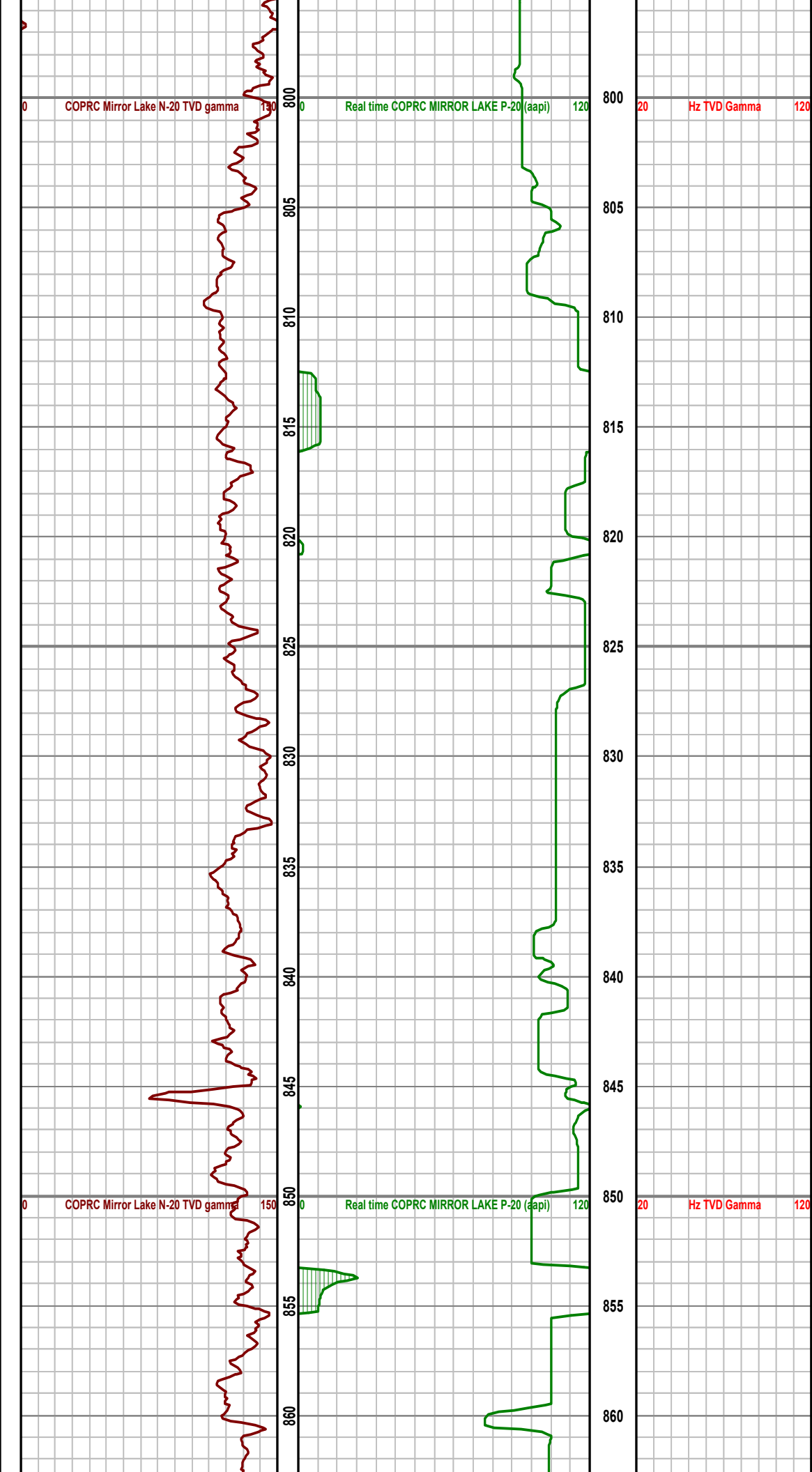












COPRC Mirror Lake N-20  
K.B = 286.5m

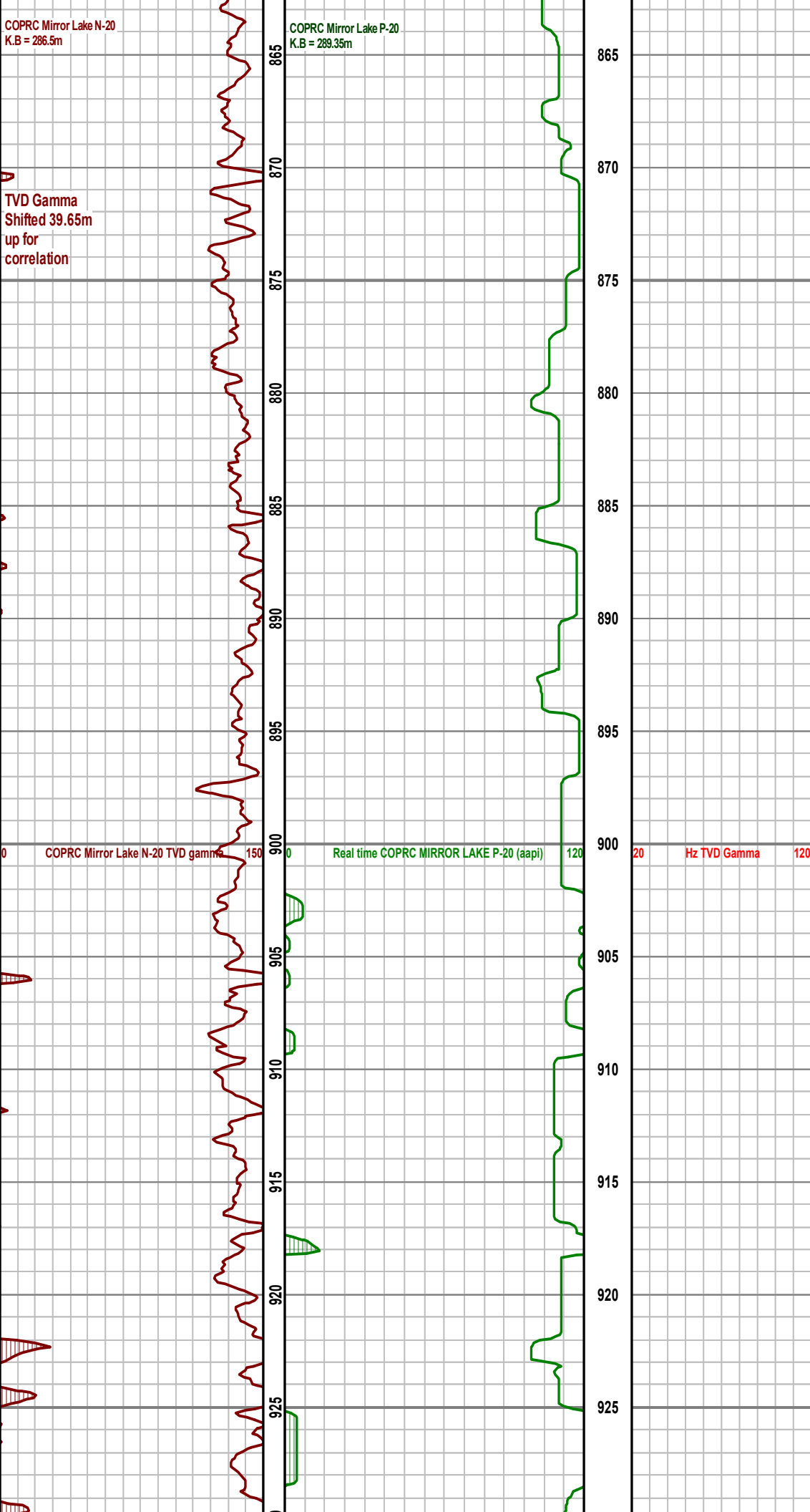
COPRC Mirror Lake P-20  
K.B = 289.35m

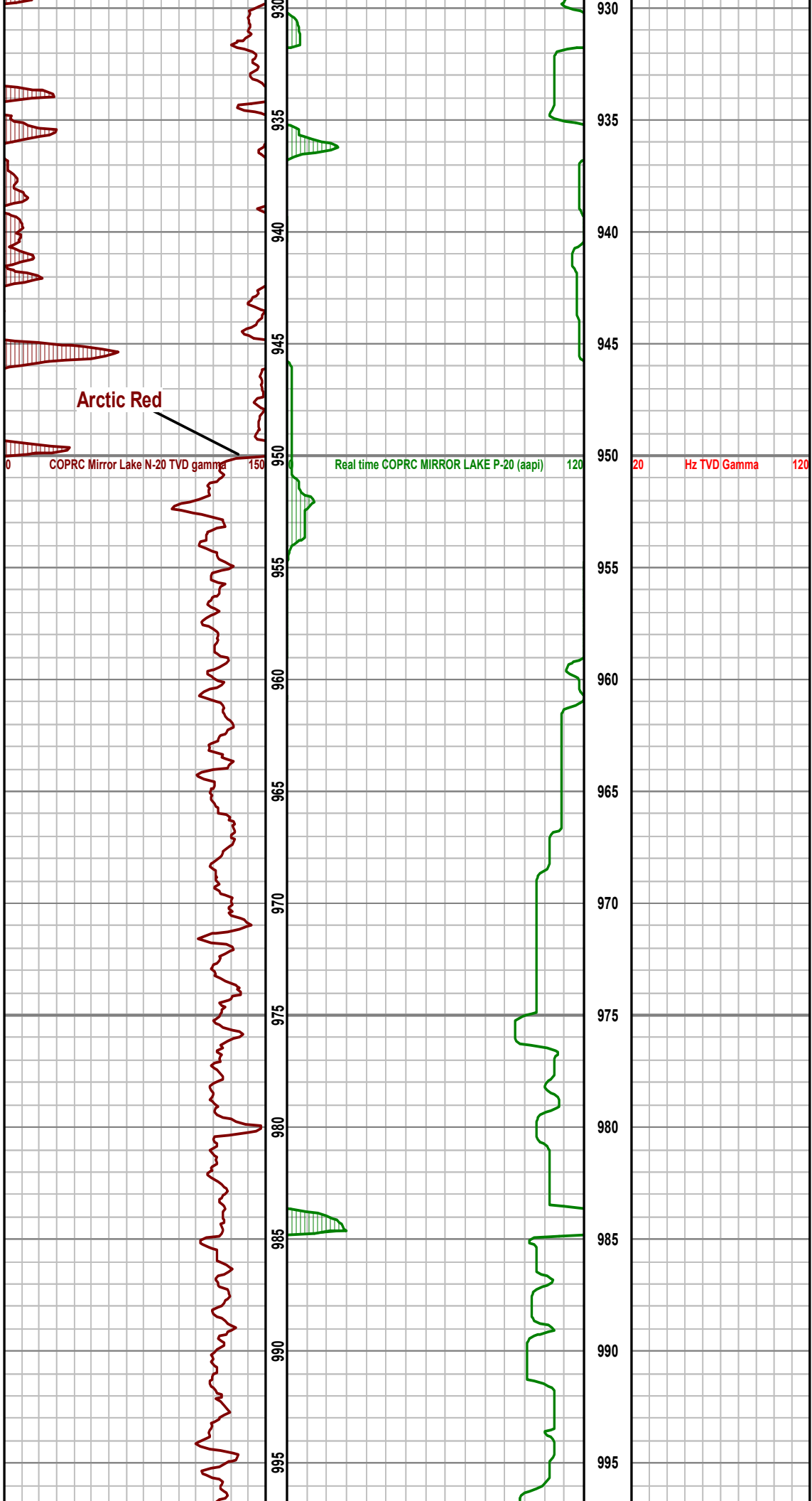
TVD Gamma  
Shifted 39.65m  
up for  
correlation

0 COPRC Mirror Lake N-20 TVD gamma 150

Real time COPRC MIRROR LAKE P-20 (aapi) 120

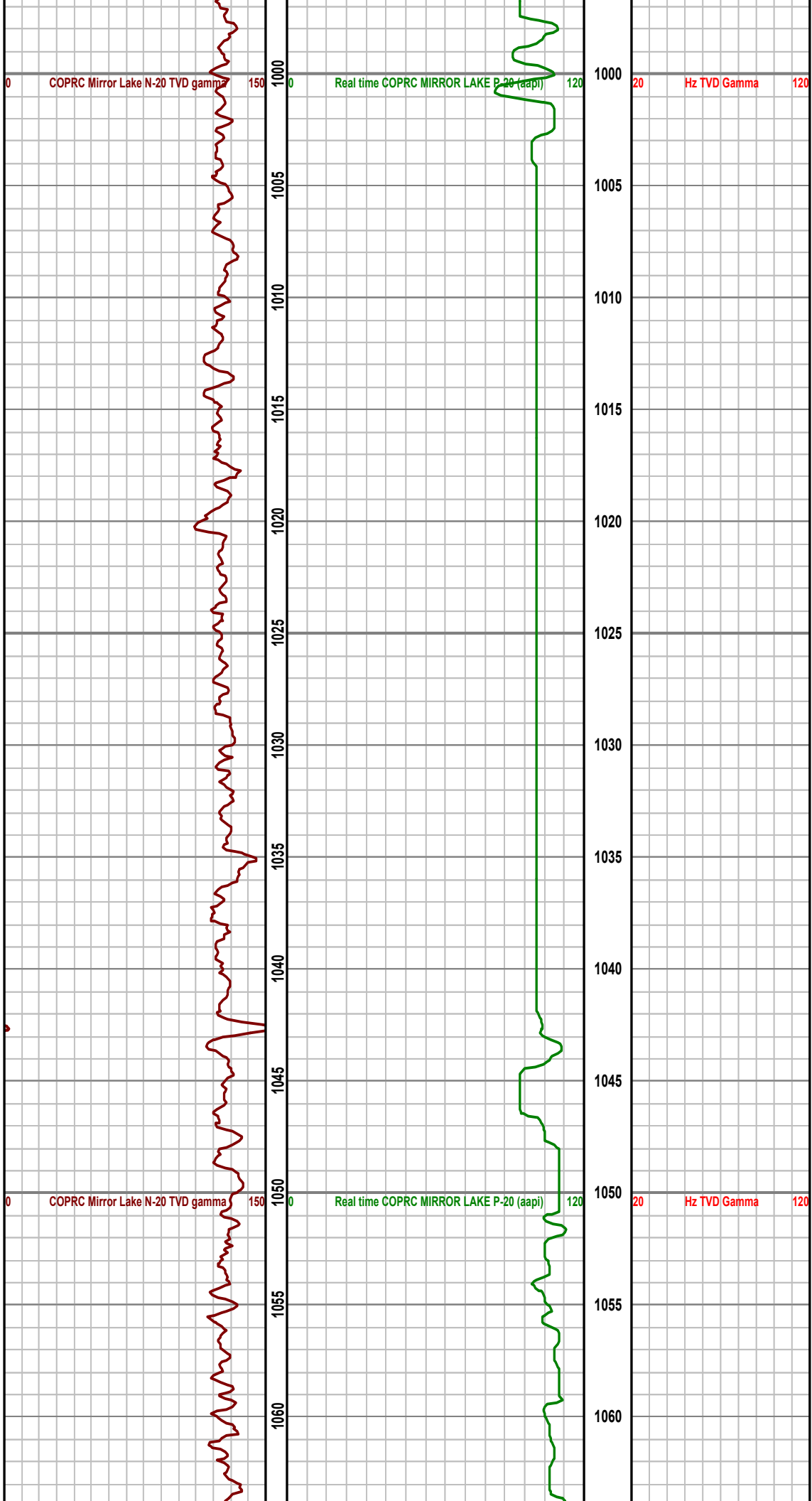
20 Hz TVD Gamma 120

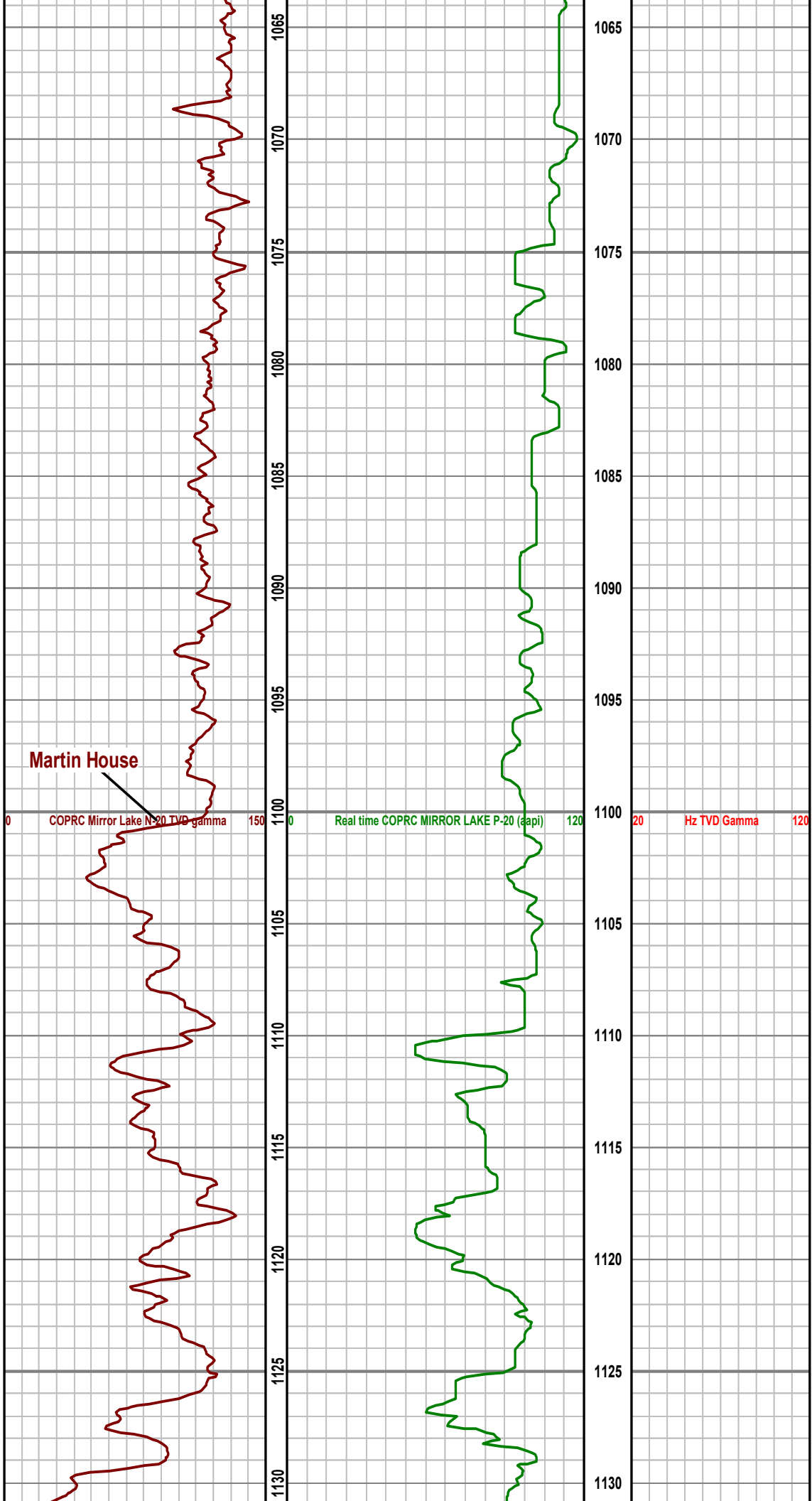




( Prog ): Arctic Red  
931.35 mMD ( 931.35mTVD, -642.00mSS.)

Arctic Red 954.00mMD,  
( 953.89mTVD, -664.54mSS.)





( Prog ): Martin House  
1084.35 mMD ( 1084.35mTVD, -795.00mSS.)

**Martin House 1110.00mMD,  
( 1109.86mTVD, -820.51mSS.)**

( Prog ): Imperial Fm  
1118.35 mMD ( 1118.35mTVD, -829.00mSS.)

Imperial Fm

COPRC Mirror Lake N-20 TVD gamma

Real time COPRC MIRROR LAKE P-20 (api)

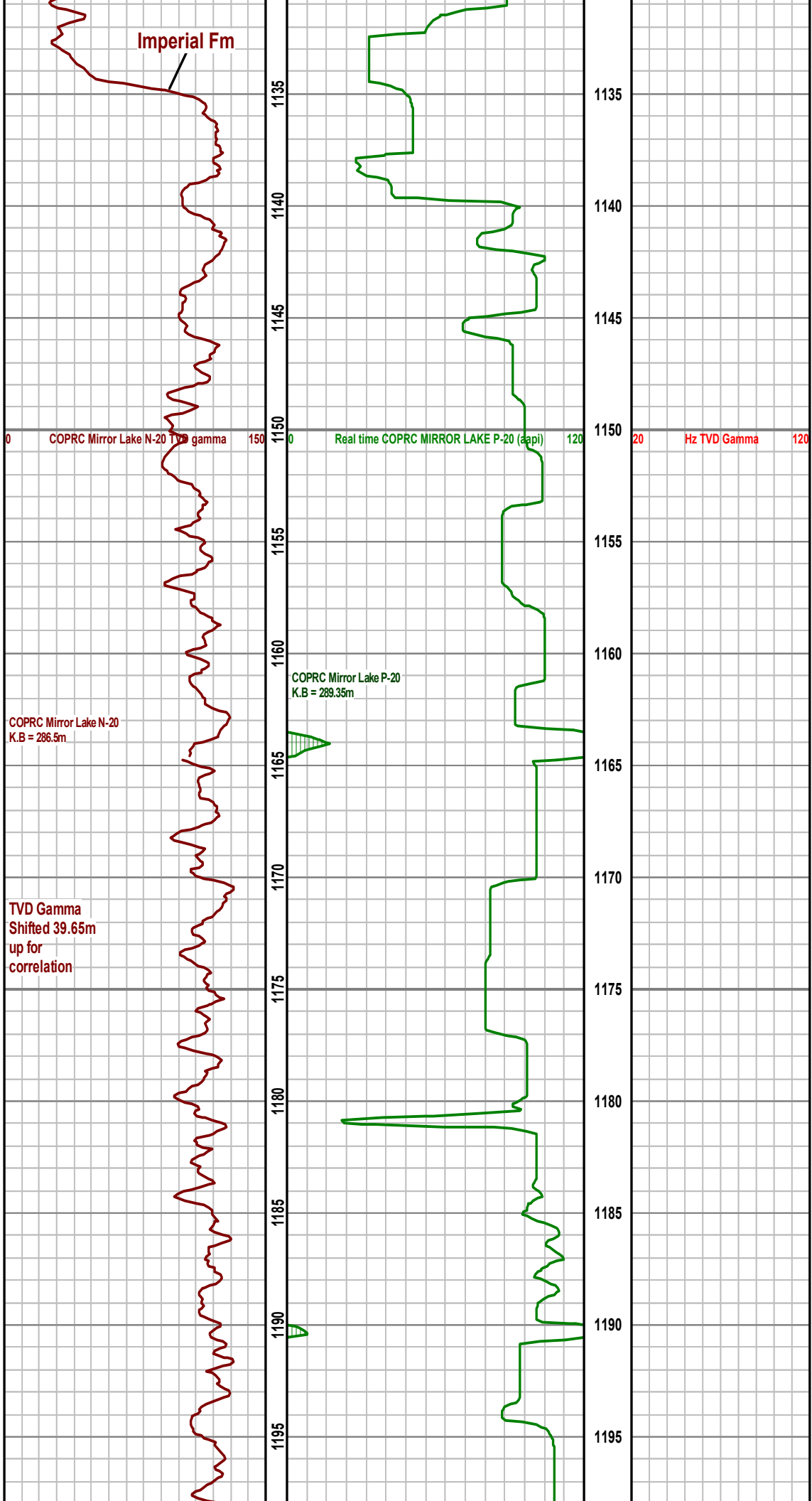
Hz TVD Gamma

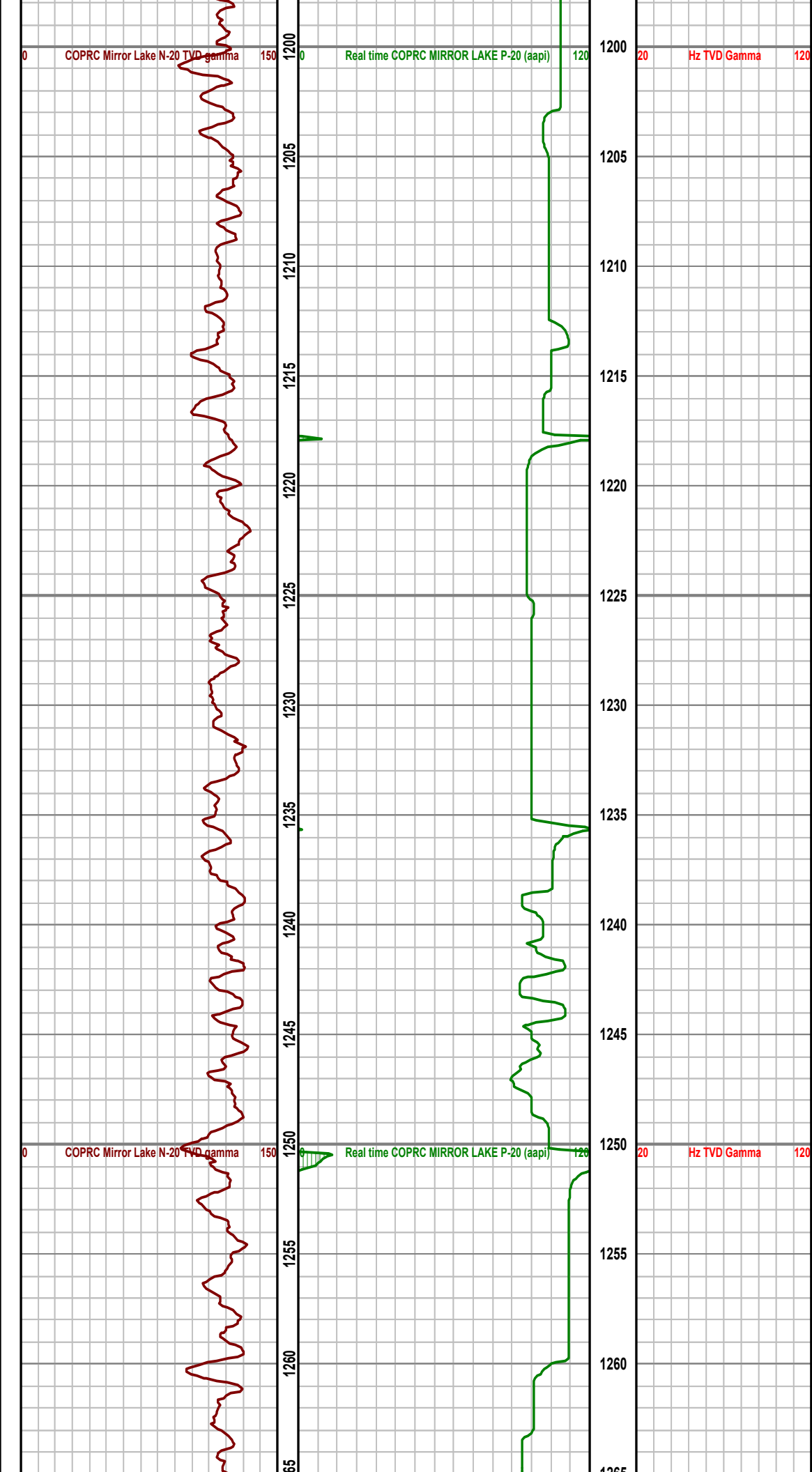
COPRC Mirror Lake N-20  
K.B = 286.5m

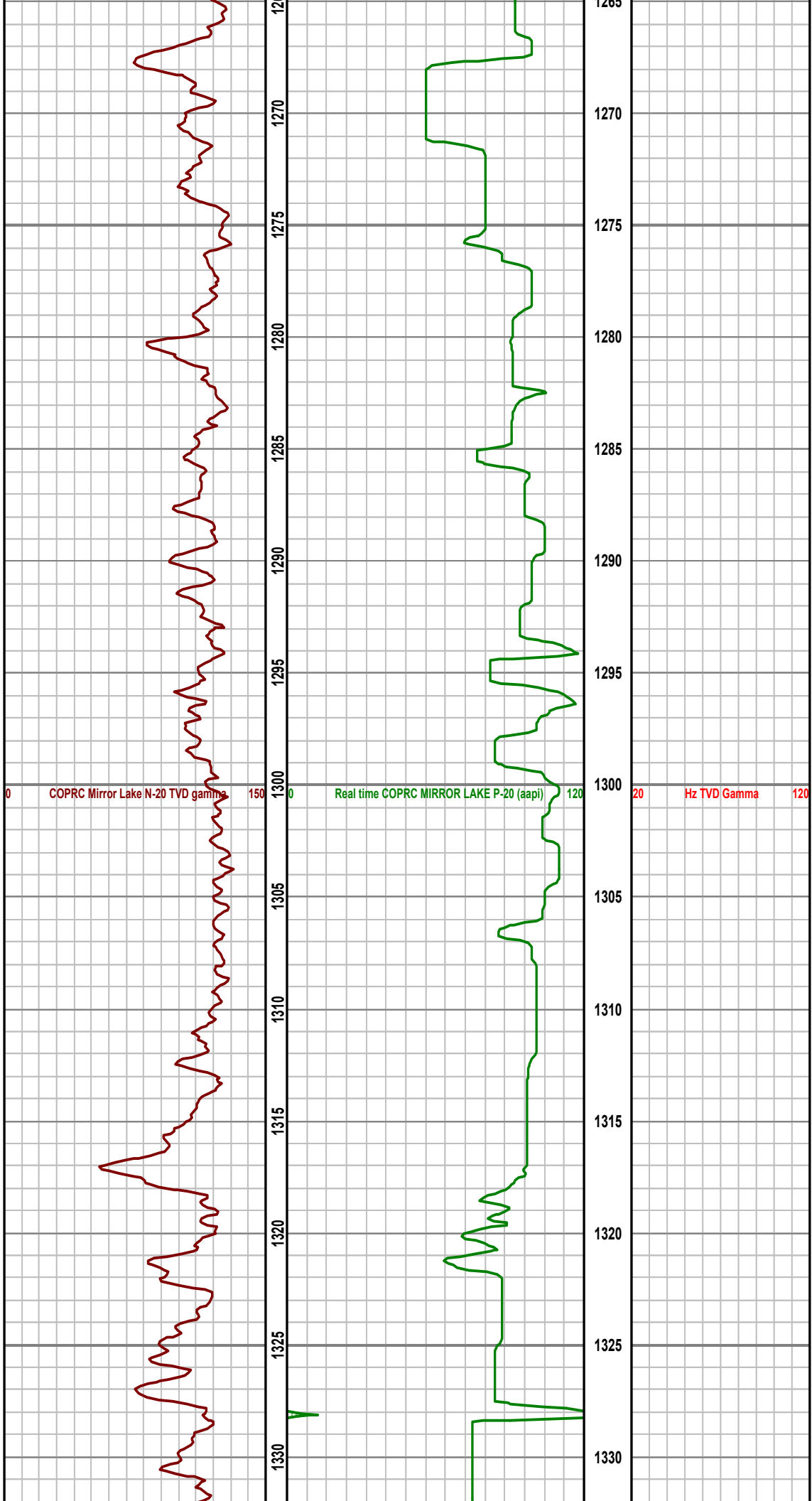
COPRC Mirror Lake P-20  
K.B = 289.35m

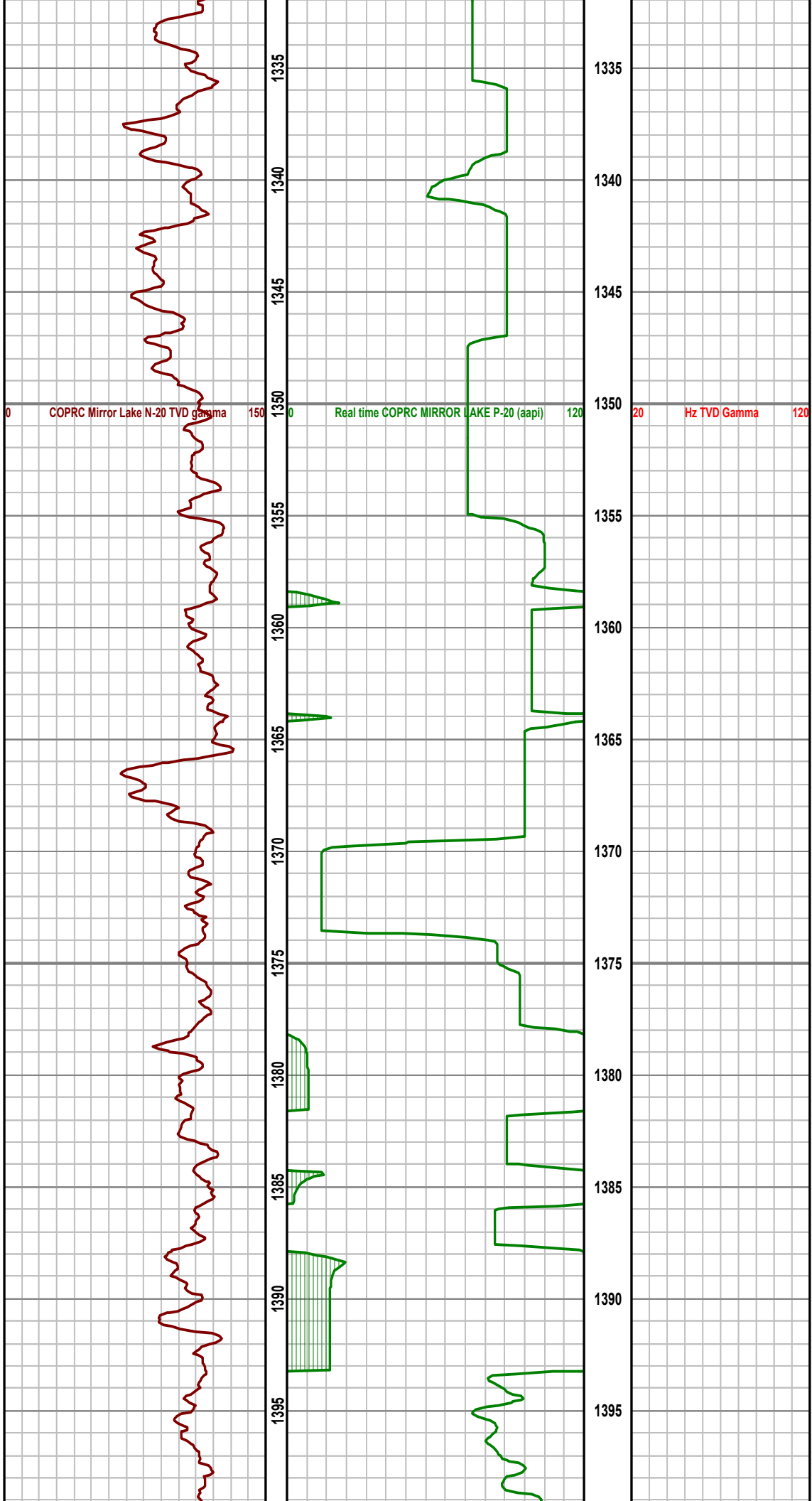
TVD Gamma  
Shifted 39.65m  
up for  
correlation

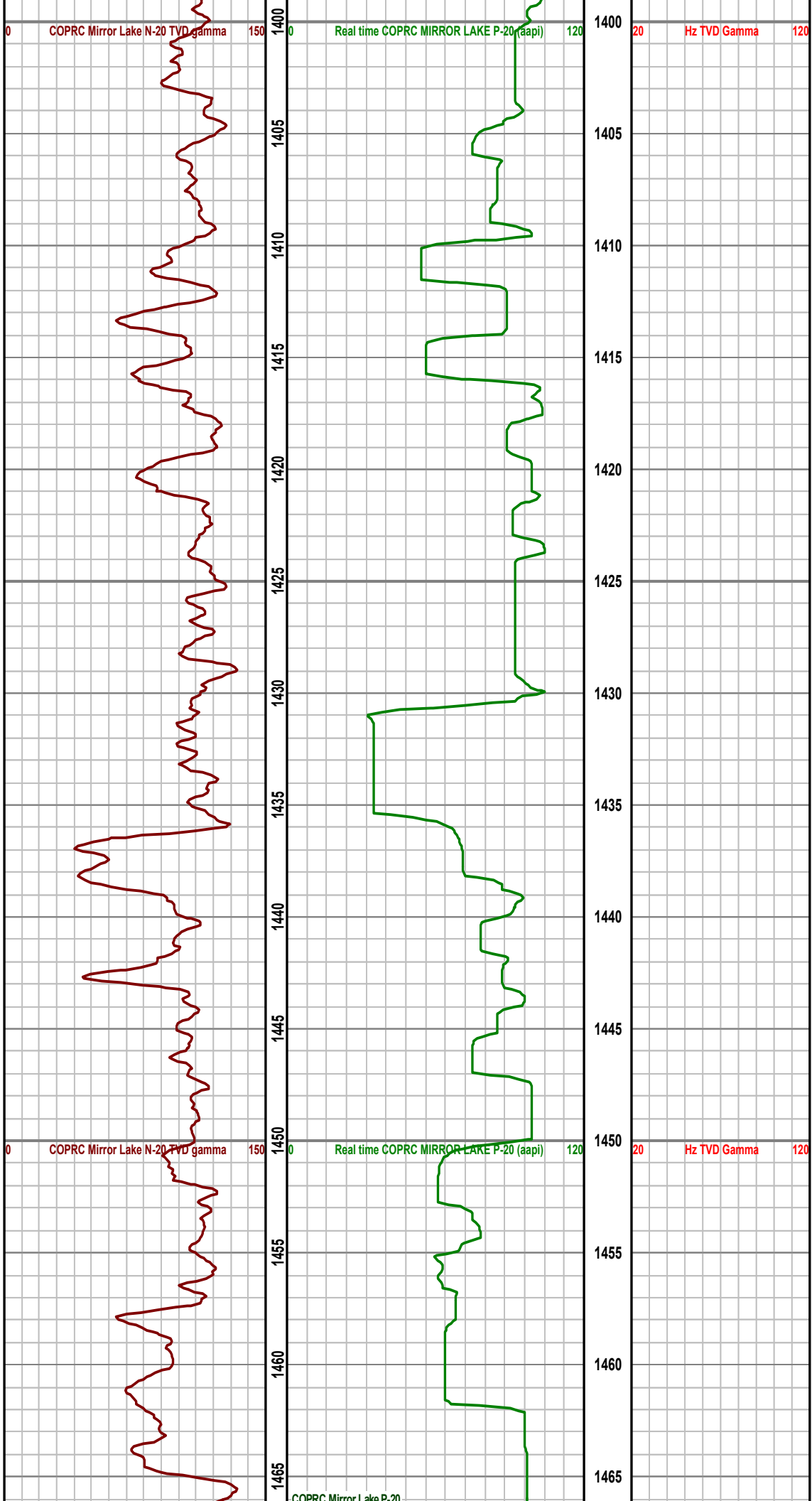
Imperial 1140.00mMD,  
( 1139.81mTVD, -850.46mSS.)











COPRC Mirror Lake N-20  
K.B = 286.5m

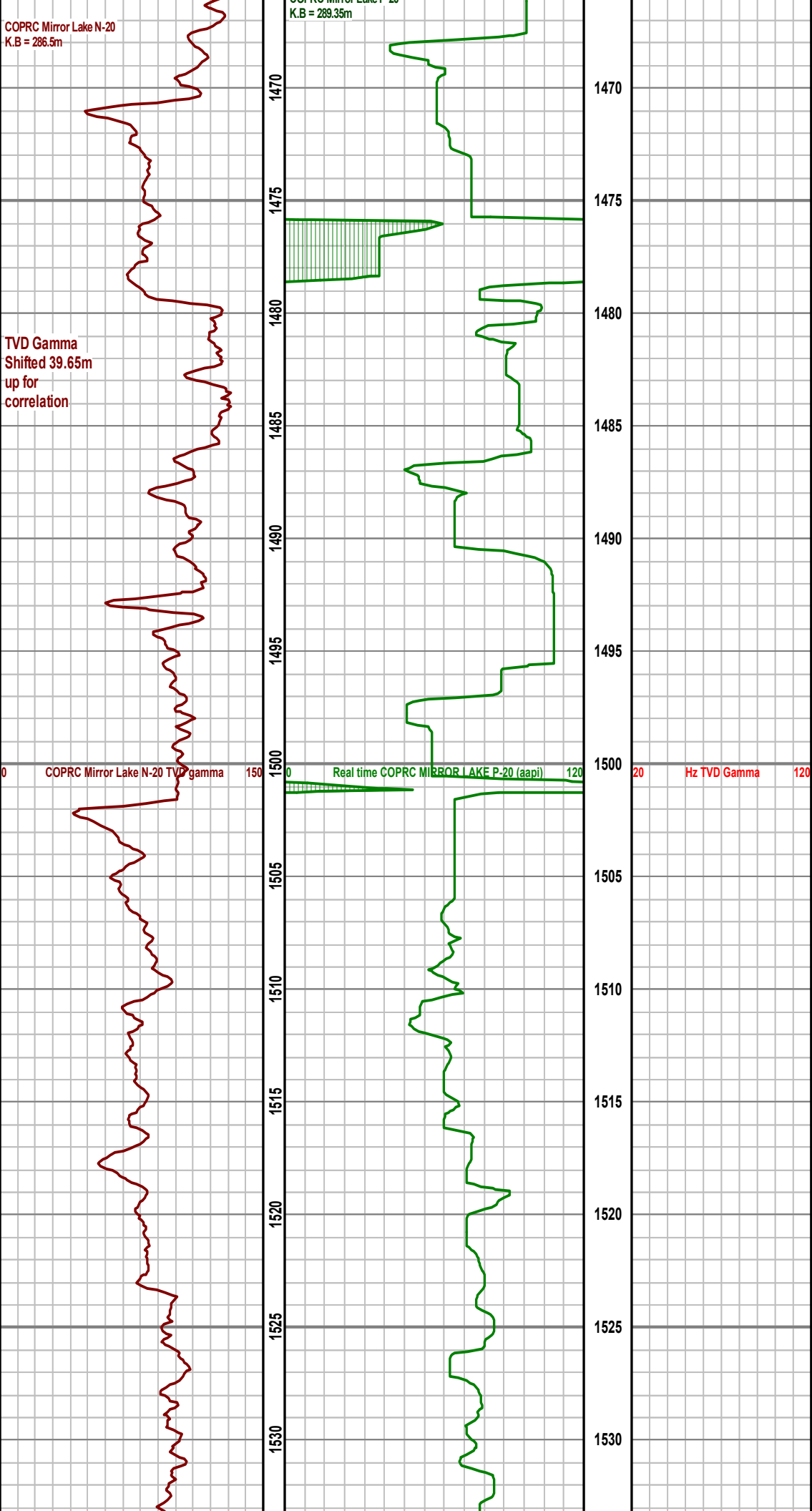
TVD Gamma  
Shifted 39.65m  
up for  
correlation

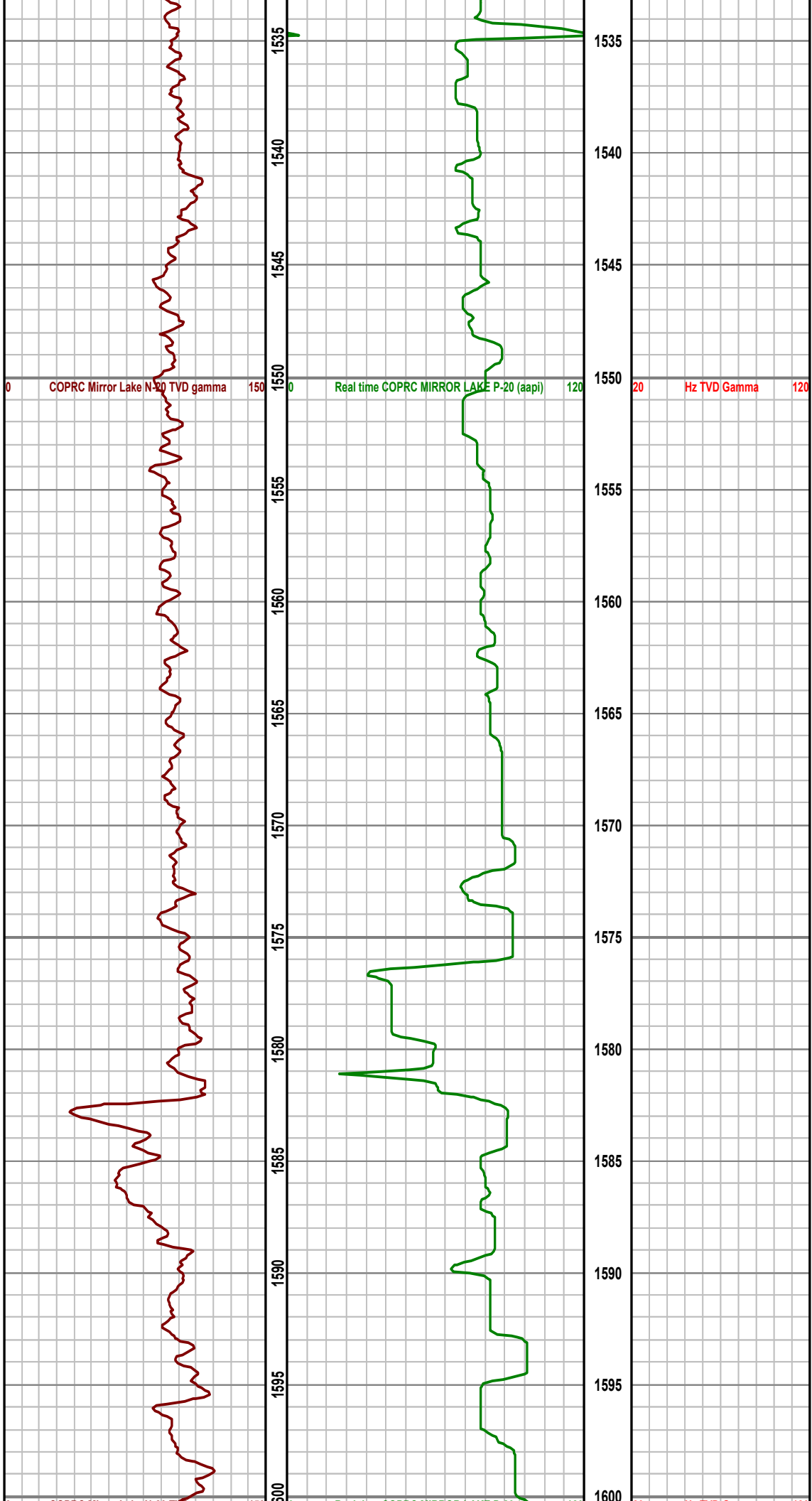
COPRC Mirror Lake N-20 TVD gamma

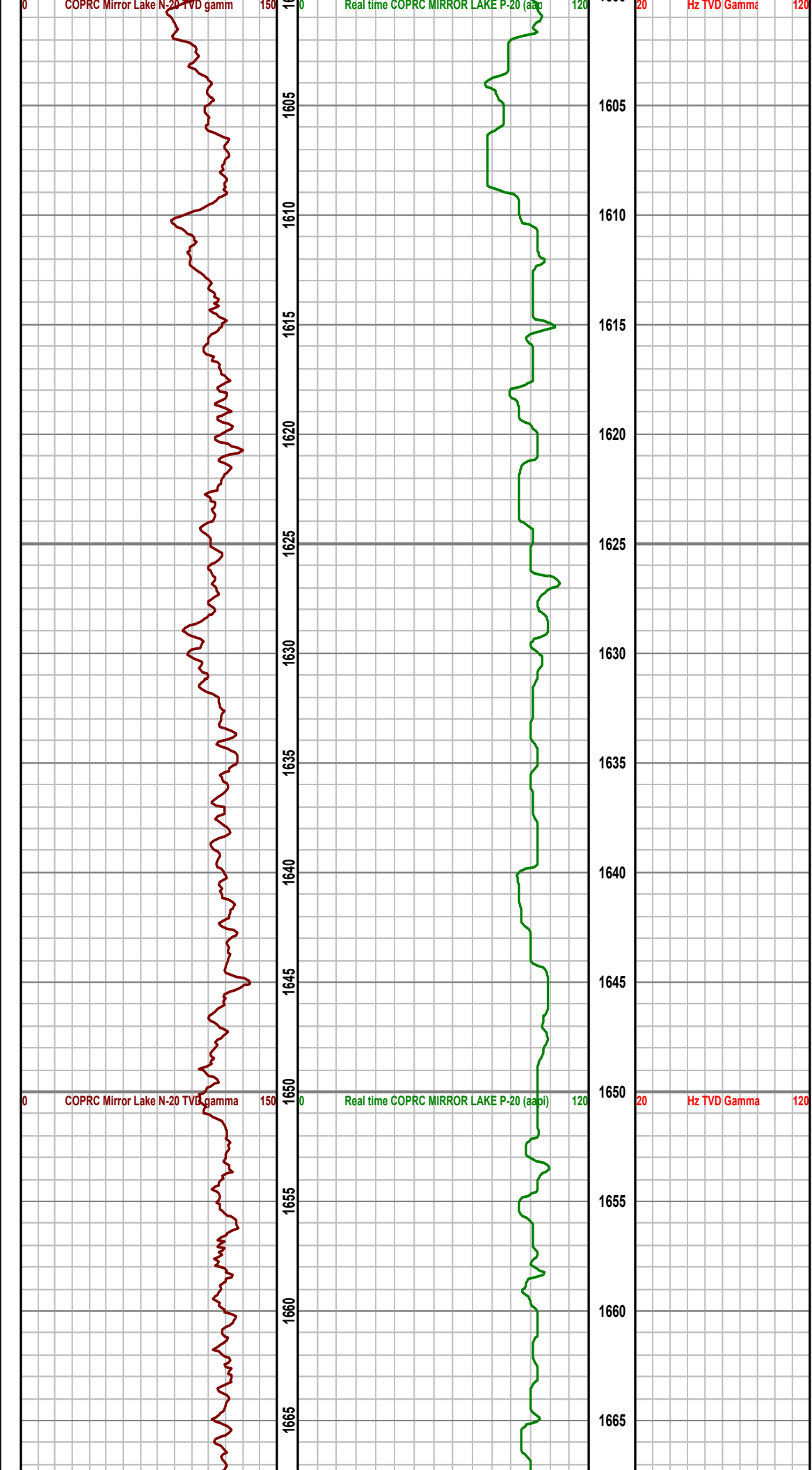
COPRC Mirror Lake P-20  
K.B = 289.35m

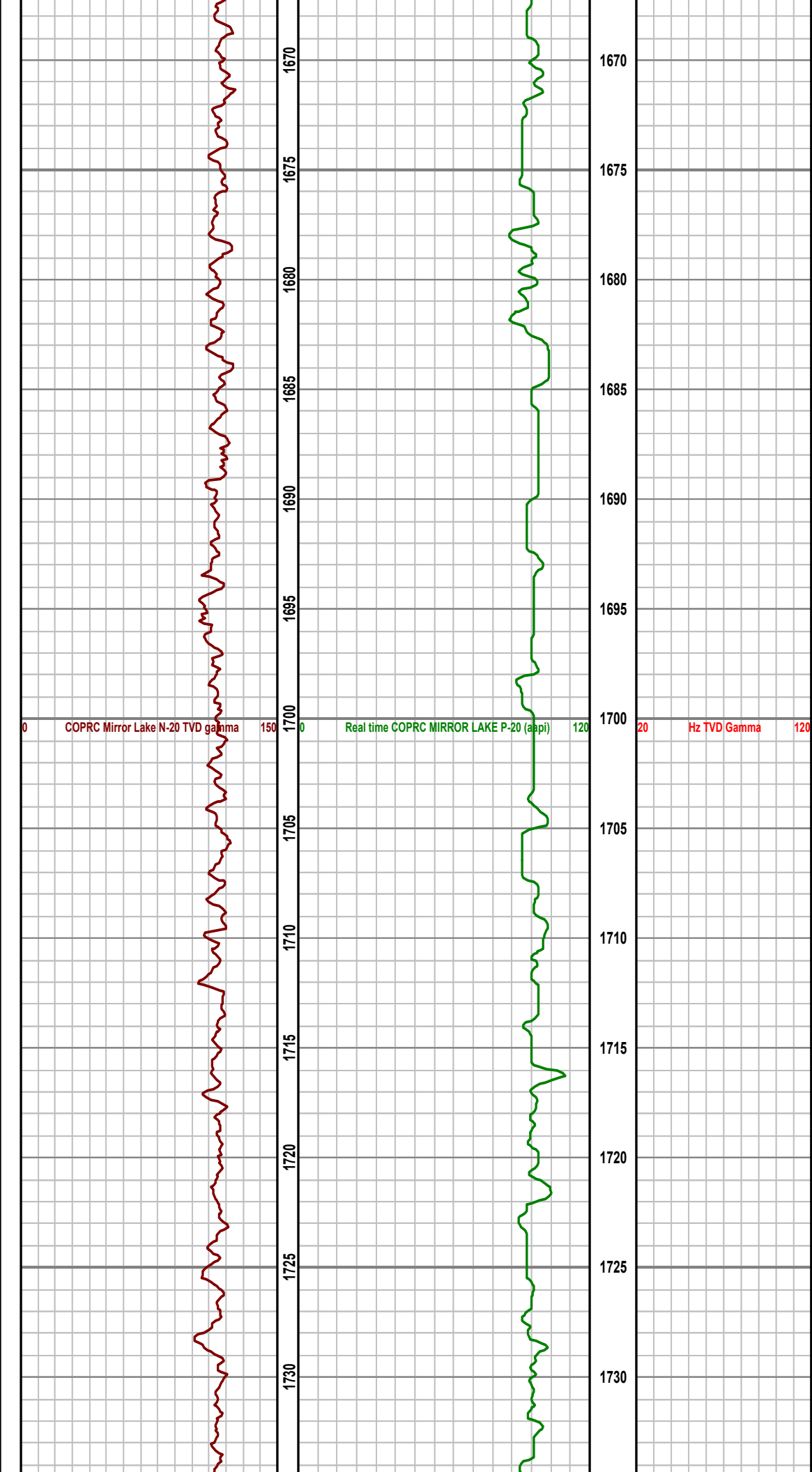
Real time COPRC MIRROR LAKE P-20 (aapi)

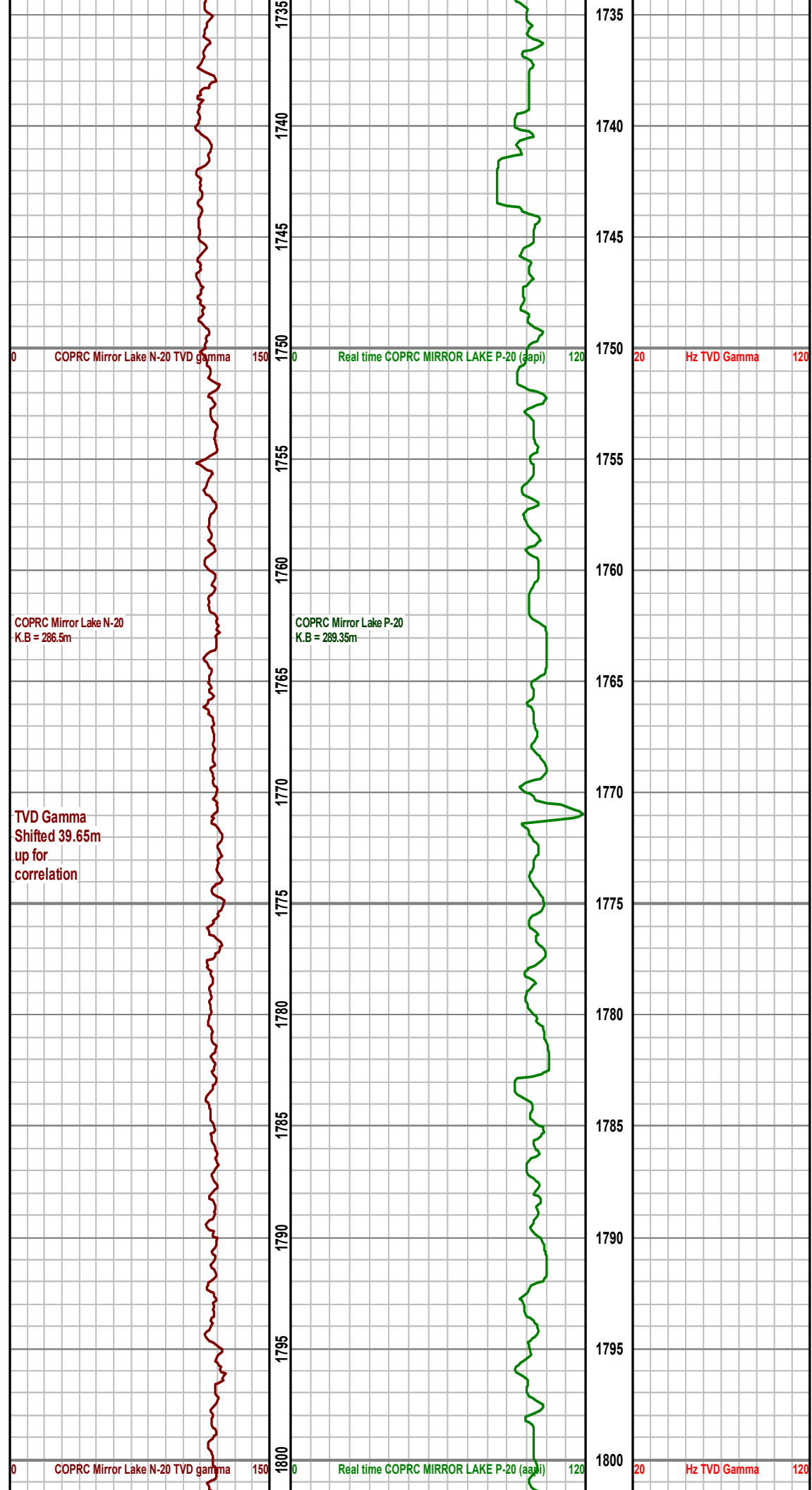
Hz TVD Gamma

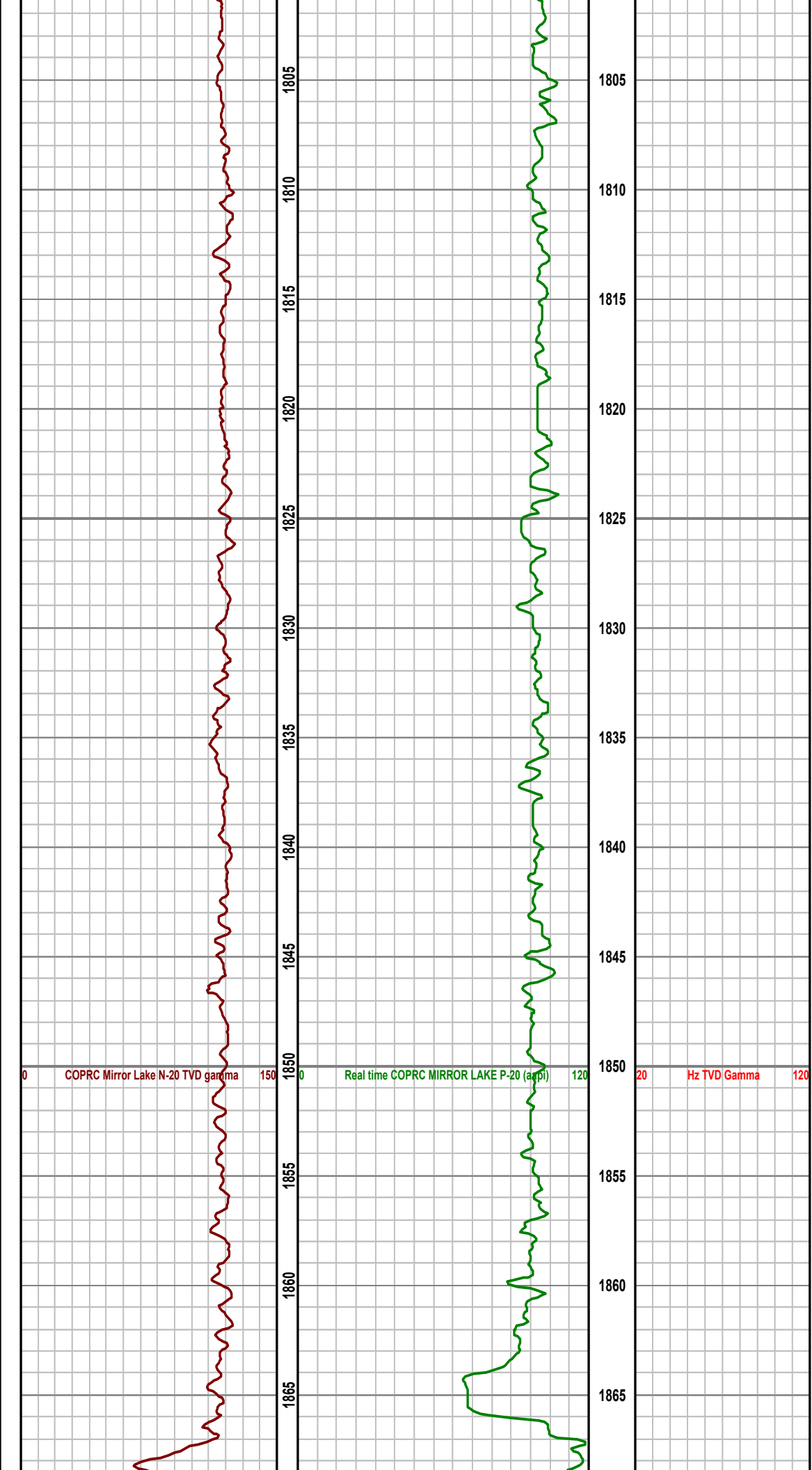


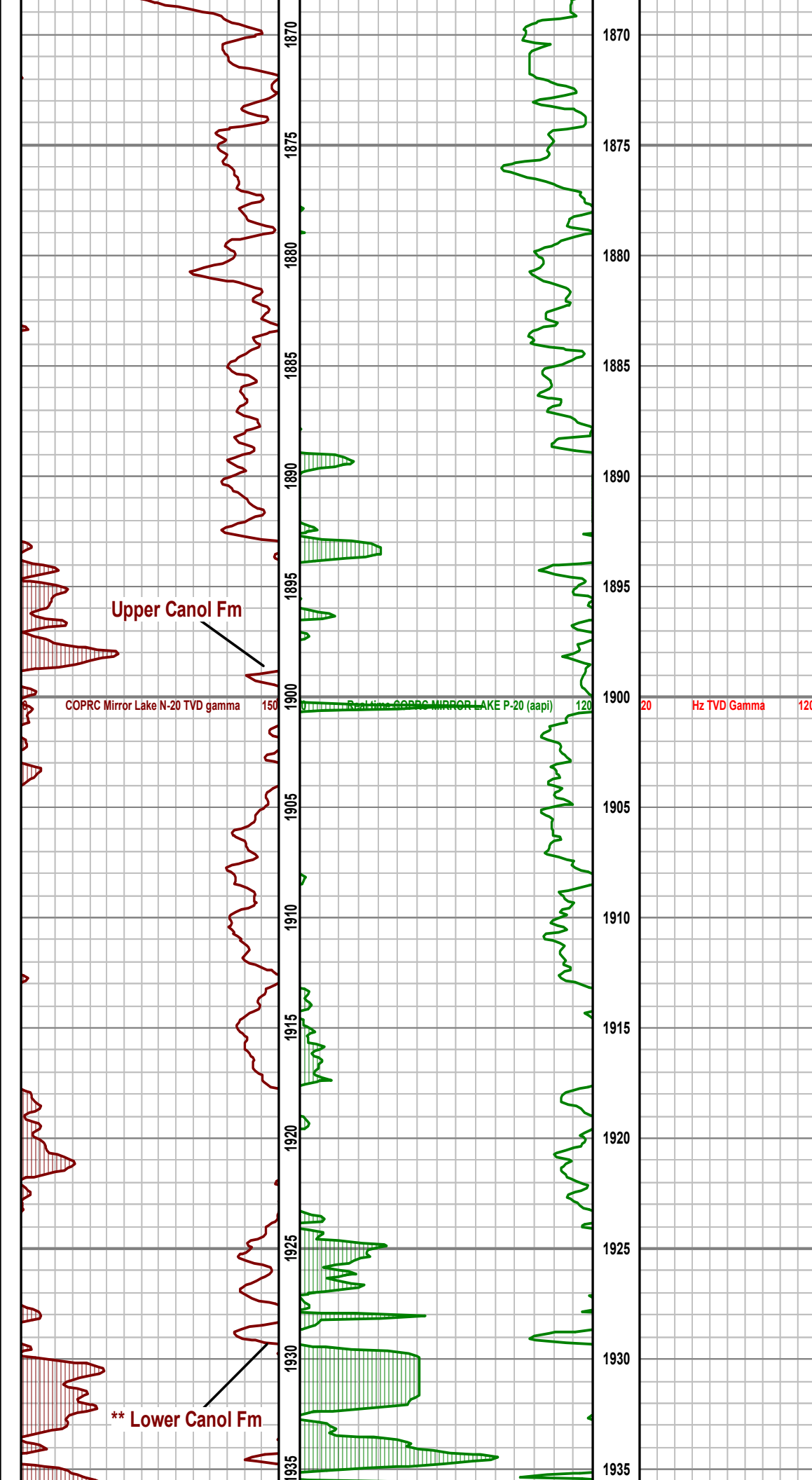










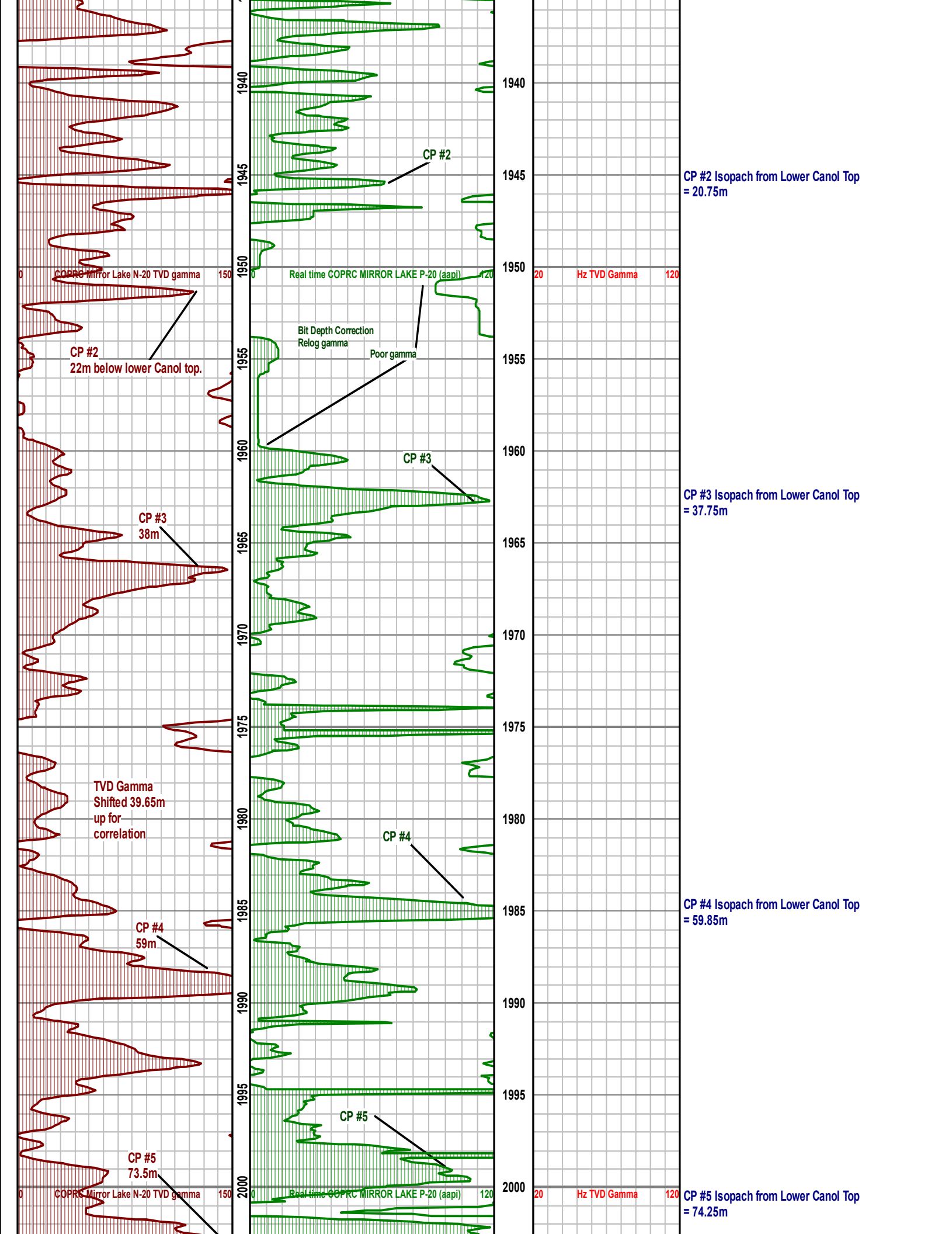


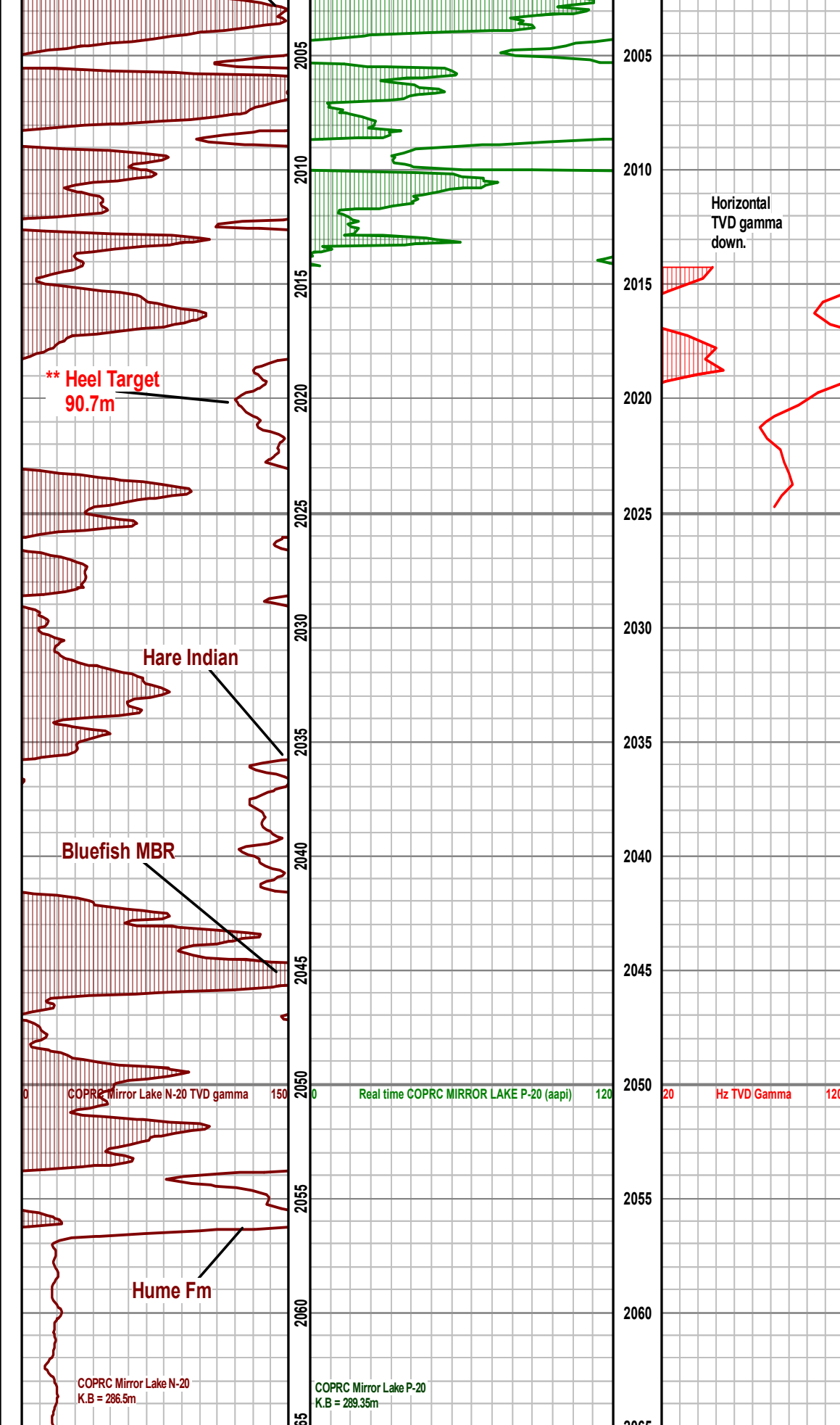
Upper Canol 1902.7m MD,  
( 1896.54mTVD, -1607.19mSS.)

( Prog ): Upper Canol  
1943 mMD ( 1897.35mTVD, -1608.00mSS.)

Lower Canol 1935.8m MD,  
( 1924.75mTVD, -1635.4mSS.)

( Prog ): \*\* Lower Canol  
2150.93 mMD ( 1929.35mTVD, -1640.00mSS.)





Intermediate TD:  
2152m MD, 2013.99m TVD @ 89 degrees,  
277.9 AZ, 240.52m VS,  
64.61m North, 231.69m West of well center  
on Feb 13, 2014 @ 09:05hrs.  
Grid N/E Y/X: N 7210084.220m, E 604172.260m  
( Prog ): Heel ( 2016.50mTVD, -1727.15mSS.)