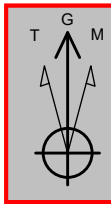
Plan #1

PDC ENERGY

Project: WELD COUNTY
Site: Edmundson Pad
Well: EDMUNDSON 04NA
Wellbore: OWB
Design: PLAN #1
Lat: 39.930013
Long: -104.810106
GL: 5052.0
KB: KB 25 @ 5077.0usft




Azimuths to Grid North
True North: -0.45°
Magnetic North: 9.48°

Magnetic Field
Strength: 53709.0nT
Dip Angle: 66.97°
Date: 12/31/2004
Model: IGRF2000

WELL DETAILS: EDMUNDSON 04NA

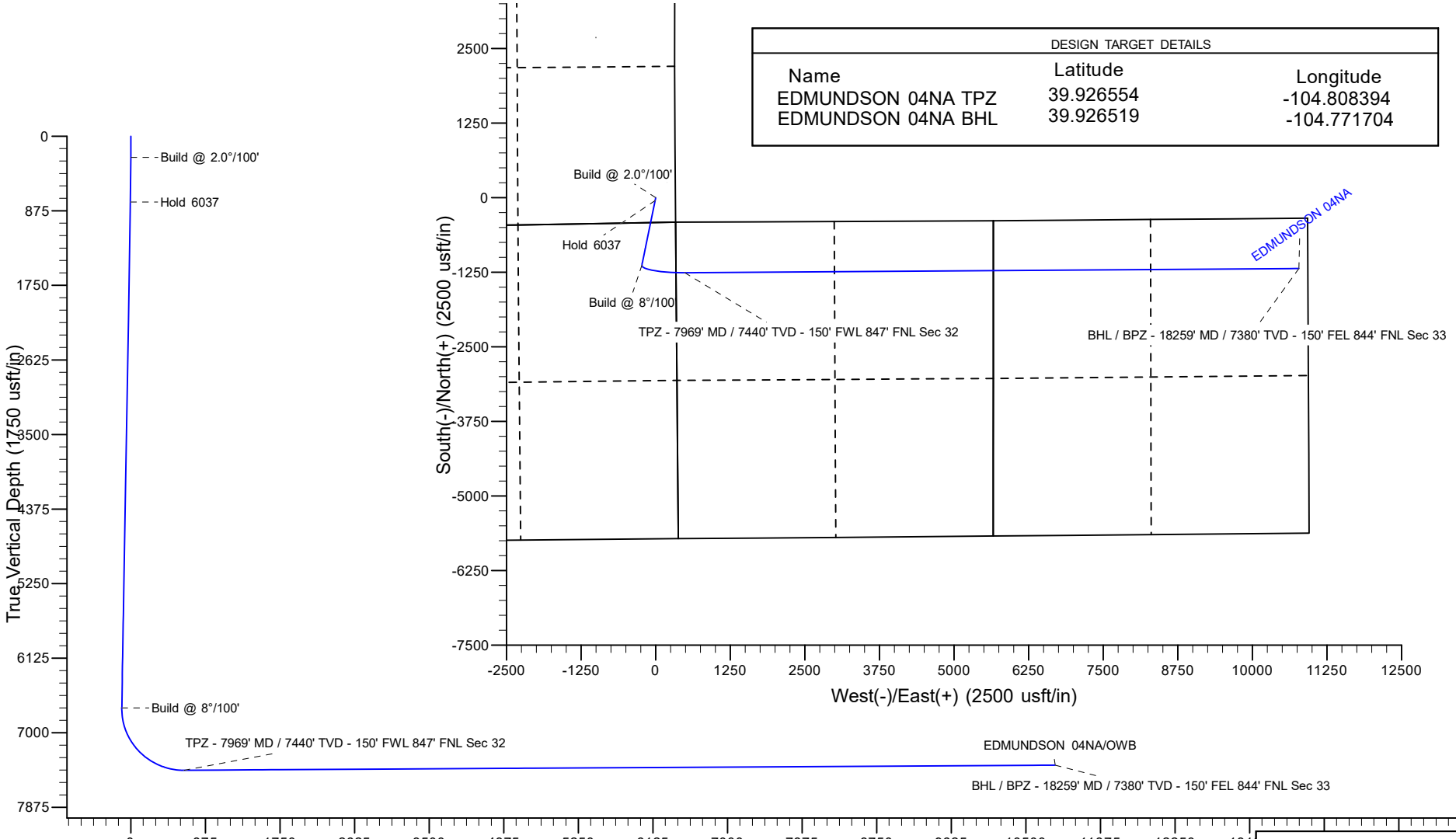
| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|---|---|---|---|---|---|
| 0.0 | 0.0 | 1218105.19 | 3193472.74 | 39.930013 | -104.810106 |

SECTION DETAILS

| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Annotation |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 250.0 | 0.00 | 0.00 | 250.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | Build @ 2.0°/100' |
| 776.2 | 10.52 | 191.57 | 773.3 | -47.2 | -9.7 | 2.00 | 191.57 | -4.4 | Hold 6037 |
| 6813.4 | 10.52 | 191.57 | 6708.8 | -1127.6 | -230.8 | 0.00 | 0.00 | -106.0 | Build @ 8°/100' |
| 7969.6 | 90.33 | 89.61 | 7440.0 | -1256.4 | 489.9 | 8.00 | -101.70 | 624.4 | TPZ - 7969' MD / 7440' TVD - 150' FWL 847' FNL Sec 32 |
| 18259.7 | 90.33 | 89.61 | 7380.0 | -1186.7 | 10779.6 | 0.00 | 0.00 | 10844.7 | BHL / BPZ - 18259' MD / 7380' TVD - 150' FEL 844' FNL Sec 33 |

DESIGN TARGET DETAILS

| Name | Latitude | Longitude |
|---|---|---|
| EDMUNDSON 04NA TPZ | 39.926554 | -104.808394 |
| EDMUNDSON 04NA BHL | 39.926519 | -104.771704 |







Plan: PLAN #1 (EDMUNDSON 04NA/OWB)
Created By: Mike Mataalii Date: 14:43, March 13 2023

# PDC Energy Inc.

## Anticollision Summary Report

| | | | |
|---|---|---|---|
| **Company:** | PDC - PLANNING DB | **Local Co-ordinate Reference:** | Well EDMUNDSON 04NA |
| **Project:** | WELD COUNTY | **TVD Reference:** | KB 25 @ 5077.0usft |
| **Reference Site:** | Edmundson Pad | **MD Reference:** | KB 25 @ 5077.0usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | EDMUNDSON 04NA | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0 usft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | OWB | **Database:** | EDM 5000.15 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 | **Error Model:** | ISCWSA |
| **Depth Range:** | Unlimited | **Scan Method:** | Closest Approach 3D |
| **Results Limited by:** | Maximum center-center distance of 2,500.0 usft | **Error Surface:** | Pedal Curve |
| **Warning Levels Evaluated at:** | 2.00 **Sigma** | **Casing Method:** | Not applied |

**Survey Tool Program** **Date** 3/13/2023

| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
|---|---|---|---|---|
| 0.0 | 18,259.7 | PLAN #1 (OWB) | MWD | OWSG MWD - Standard |

**Summary**

| Site Name<br>Offset Well - Wellbore - Design | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
|---|---|---|---|---|---|---|
| Chatfield Offsets | | | | | | |
| AGRI PROD FED 32-17 - OWB - OWB | | | | | | Out of range |
| AGRI PROD INC 32-1F - OWB - OWB | | | | | | Out of range |
| AGRI PROD INC 32-2F - OWB - OWB | | | | | | Out of range |
| AGRI PROD INC FED 32-7F - OWB - OWB | | | | | | Out of range |
| AGRI PROD INC FED 32-8F - OWB - OWB | | | | | | Out of range |
| BERIG 17-35 - OWB - OWB | | | | | | Out of range |
| BERIG STATE K 36-19 - OWB - OWB | | | | | | Out of range |
| BERIG STATE K 36-29 - OWB - OWB | | | | | | Out of range |
| BERIG UPRR 41-35 2 - OWB - OWB | | | | | | Out of range |
| BERIG UPRR 42-35 - OWB - OWB | | | | | | Out of range |
| CADI 1 - OWB - OWB | | | | | | Out of range |
| CECIL K 35-29 - OWB - OWB | | | | | | Out of range |
| CECIL K 35-30 - OWB - OWB | | | | | | Out of range |
| COREY 31-32 - owb - OWB | | | | | | Out of range |
| DEROO WILFRED 1 - OWB - OWB | | | | | | Out of range |
| FLOYD 1 - OWB - OWB | | | | | | Out of range |
| FRANK 21-32 - OWB - OWB | | | | | | Out of range |
| FRANK 32-24 - OWB - OWB | | | | | | Out of range |
| FRANK 5 - OWB\ - OWB\ | | | | | | Out of range |
| HEITMAN K 34-4 - OWB - OWB | | | | | | Out of range |
| HEITMAN K34-5 - OWB - OWB | | | | | | Out of range |
| HSR-AUSTIN 16-26 - OWB - OWB | | | | | | Out of range |
| HSR-BURMESTER 7-34 - OWB - OWB | | | | | | Out of range |
| HSR-CARRICO 3-34 - OWB - OWB | | | | | | Out of range |
| HSR-COLE 6-34 - OWB - OWB | | | | | | Out of range |
| HSR-DIEFENBACH 10-34 - OWB - OWB | | | | | | Out of range |
| HSR-ELLIOT 15-26 - OWB - OWB | | | | | | Out of range |
| HSR-FRAHM 9-34 - OWB - OWB | | | | | | Out of range |
| HSR-HARMON 12-36 - OWB - OWB | | | | | | Out of range |
| HSR-SCHMID 2-34 - OWB - OWB | | | | | | Out of range |
| HSR-SPILMAN 9-35 - OWB - OWB | | | | | | Out of range |
| HSR-THOMAS 10-35 - OWB - OWB | | | | | | Out of range |
| HSR-TRAIN 12-35 - OWB - OWB | | | | | | Out of range |
| HUNT K FED 33-19 - OWB - OWB | | | | | | Out of range |
| JOHNSON 32-35 - OWB - OWB | | | | | | Out of range |
| JOHNSON UPRR 31-35 - OWB - OWB | | | | | | Out of range |
| KEISER 14-28 - OWB - OWB | | | | | | Out of range |

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| **Reference Site:** | Edmundson Pad | **MD Reference:** | KB 25 @ 5077.0usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | EDMUNDSON 04NA | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0 usft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | OWB | **Database:** | EDM 5000.15 Single User Db |
| **Reference Design:** | PLAN #1 | **Offset TVD Reference:** | Offset Datum |

**Summary**

| Site Name<br>Offset Well - Wellbore - Design | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
|---|---|---|---|---|---|---|
| Chatfield Offsets | | | | | | |
| KEISER FEDERAL 13-28 - OWB - OWB | | | | | | Out of range |
| L H MILLER UNIT 2 - OWB - OWB | | | | | | Out of range |
| LORENZ 23-35 - OWB - OWB | | | | | | Out of range |
| LORENZ 34-28 - OWB - OWB | | | | | | Out of range |
| LORENZ 39-35 - owb - OWB | | | | | | Out of range |
| LORENZ 44-28 - OWB - OWB | | | | | | Out of range |
| MARGHEIM 24-35 - OWB - OWB | | | | | | Out of range |
| MCLEOD 2 - OWB - OWB | | | | | | Out of range |
| MCLEOD 2-29B - OWB - OWB | | | | | | Out of range |
| MCLEOD 29-2 - OWB - OWB | | | | | | Out of range |
| MCLEOD 29-29 - OWB - OWB | | | | | | Out of range |
| MCLEOD 29-29X - OWB - OWB | | | | | | Out of range |
| MCLEOD 6 - OWB - OWB | | | | | | Out of range |
| RAYMOND MARTIN GAS UNIT 1 - OWB - OWB | | | | | | Out of range |
| SANAU & BARTELS 25-13F - OWB - OWB | | | | | | Out of range |
| SANDAU 34-11F - OWB - OWB | | | | | | Out of range |
| SANDAU 34-12F - OWB - OWB | | | | | | Out of range |
| SCHWAB 26-13F - OWB - OWB | | | | | | Out of range |
| SCHWAB 26-14F - OWB - OWB | | | | | | Out of range |
| SHUTT 20-34 - OWB - OWB | | | | | | Out of range |
| SHUTT 24-34 - OWB - OWB | | | | | | Out of range |
| STATE 36-4F - OWB - OWB | | | | | | Out of range |
| STATE 36-5F - OWB - OWB | | | | | | Out of range |
| SWEET VLY FRM UPRR 31-33#2 - OWB - OWB | | | | | | Out of range |
| SWEET VLY FRM UPRR 41-33 - OWB - OWB | | | | | | Out of range |
| TANNER K 33-11 - OWB - OWB | | | | | | Out of range |
| TANNER K FED 33-12 - OWB - OWB | | | | | | Out of range |
| ULRICH 23-26 - OWB - OWB | | | | | | Out of range |
| ULRICH 37-26 - OWB - OWB | | | | | | Out of range |
| ULRICH P - OWB - OWB | | | | | | Out of range |
| UPRC 27-13F - OWB - OWB | | | | | | Out of range |
| UPRC 27-14F - OWB - OWB | | | | | | Out of range |
| UPRC 27-15F - OWB - OWB | | | | | | Out of range |
| UPRC 27-16F - OWB - OWB | | | | | | Out of range |
| UPRC 33-7F - Wellbore #1 - OWB | | | | | | Out of range |
| UPRC 33-8F - OWB - OWB | | | | | | Out of range |
| UPRC 35-3F - OWB - OWB | | | | | | Out of range |
| UPRC 35-4F - OWB - OWB | | | | | | Out of range |
| UPRC 35-5F - OWB - OWB | | | | | | Out of range |
| UPRC 35-6F - OWB - OWB | | | | | | Out of range |
| UPRC FED 33-3F - OWB - OWB | | | | | | Out of range |
| UPRC FED 33-4F - OWB - OWB | | | | | | Out of range |
| UPRC FED 33-5F - OWB - OWB | | | | | | Out of range |
| UPRC FED 33-6F - OWB - OWB | | | | | | Out of range |
| UPRR 21 PAN AM K 1 - OWB - OWB | | | | | | Out of range |
| WEBER K 33-10 - OWB - OWB | | | | | | Out of range |
| WEBER K 33-9 - OWB - OWB | | | | | | Out of range |
| WIEDEMAN 29-3 - OWB - OWB | | | | | | Out of range |
| WIEDEMAN 5 - OWB - OWB | | | | | | Out of range |
| WILLIAMS 41-34-1 - OWB - OWB | | | | | | Out of range |
| WILLIAMS 42-34 - OWB - OWB | | | | | | Out of range |
| WOLFE 5 - OWB - OWB | | | | | | Out of range |
| WOLFE 6I - OWB - OWB | | | | | | Out of range |

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| **Well Error:** | 0.0 usft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | OWB | **Database:** | EDM 5000.15 Single User Db |
| **Reference Design:** | PLAN #1 | **Offset TVD Reference:** | Offset Datum |

**Summary**

| Site Name<br>Offset Well - Wellbore - Design | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
|---|---|---|---|---|---|---|
| Edmundson Offsets | | | | | | |
| CUTLER 1-A - OWB - OWB | 11,136.1 | 7,434.5 | 1,138.1 | 903.6 | 4.853 | CC |
| CUTLER 1-A - OWB - OWB | 11,200.0 | 7,434.2 | 1,139.9 | 903.3 | 4.818 | ES |
| CUTLER 1-A - OWB - OWB | 11,300.0 | 7,433.6 | 1,149.9 | 910.6 | 4.806 | SF |
| CUTLER 1D - OWB - OWB | 11,932.8 | 7,432.9 | 78.6 | -176.2 | 0.309 | No-Go Zone - Stop Drilling, ( |
| EDMUNDSON LE 33-082HC - OWB - OWB | 772.8 | 772.0 | 0.2 | -6.0 | 0.037 | No-Go Zone - Stop Drilling, ( |
| EDMUNDSON LE 33-082HC - OWB - OWB | 7,550.0 | 7,637.2 | 31.2 | -19.8 | 0.612 | No-Go Zone - Stop Drilling, E |
| ERGER 1 - OWB - OWB | | | | | | Out of range |
| ERNEST H KALLSEN 2 - OWB - OWB | | | | | | Out of range |
| ERNST H KALLSEN 1 - OWB - OWB | | | | | | Out of range |
| EVERETTE DAHLINGER A1 - OWB - OWB | | | | | | Out of range |
| FARNER 1 - OWB - OWB | 12,290.5 | 7,432.8 | 2,488.2 | 2,341.9 | 17.004 | CC |
| FARNER 1 - OWB - OWB | 12,400.0 | 7,432.2 | 2,490.6 | 2,341.1 | 16.654 | ES |
| FARNER 1 - OWB - OWB | 12,500.0 | 7,431.6 | 2,497.0 | 2,344.8 | 16.399 | SF |
| FREEMAN 1 - OWB - OWB | | | | | | Out of range |
| FREEMAN 1-A - OWB - OWB | | | | | | Out of range |
| GREEN 1 - OWB - OWB | 18,259.7 | 7,417.0 | 2,474.8 | 2,129.6 | 7.170 | CC, ES, SF |
| IKE 1 - OWB - OWB | | | | | | Out of range |
| KIMMEL 12-33 - OWB - OWB | 13,824.3 | 7,432.9 | 974.3 | 670.1 | 3.203 | CC, ES |
| KIMMEL 12-33 - OWB - OWB | 13,900.0 | 7,432.4 | 977.2 | 670.7 | 3.188 | SF |
| OHD 1 - OWB - OWB | | | | | | Out of range |
| PC 1S-66-2928 - OWB - OWB | 283.7 | 319.6 | 2,156.5 | 2,153.3 | 662.254 | CC |
| PC 1S-66-2928 - OWB - OWB | 300.0 | 333.3 | 2,156.6 | 2,153.3 | 650.621 | ES |
| PC 1S-66-2928 - OWB - OWB | 4,400.0 | 4,643.4 | 2,492.7 | 2,456.3 | 68.521 | SF |
| PC 1S-66-2928 14CDH - OWB - OWB | 0.0 | 17.0 | 2,123.3 | | | |
| PC 1S-66-2928 14CDH - OWB - OWB | 18,000.0 | 17,747.0 | 2,405.9 | 1,864.1 | 4.441 | ES, SF |
| PC 1S-66-2928 17NH - OWB - OWB | 5,759.3 | 6,198.6 | 1,621.6 | 1,565.0 | 28.633 | CC |
| PC 1S-66-2928 17NH - OWB - OWB | 17,900.0 | 17,454.0 | 1,660.0 | 1,117.7 | 3.061 | ES, SF |
| PC 1S-66-2928 17NH - ST01 - ST01 | 5,759.3 | 6,198.6 | 1,621.6 | 1,565.0 | 28.633 | CC |
| PC 1S-66-2928 17NH - ST01 - ST01 | 17,844.4 | 17,451.0 | 1,660.1 | 1,119.3 | 3.070 | ES |
| PC 1S-66-2928 17NH - ST01 - ST01 | 17,900.0 | 17,451.0 | 1,661.1 | 1,119.7 | 3.068 | SF |
| PC 1S-66-2928 19NH - OWB - OWB | 17,861.1 | 17,580.0 | 1,234.5 | 693.3 | 2.281 | CC, ES, SF |
| PC 1S-66-2928 20CDH - OWB - OWB | 17,410.4 | 17,439.5 | 830.4 | 342.6 | 1.703 | Collision Risk Procedures Re |
| PC 1S-66-2928 20CDH - OWB - OWB | 17,800.0 | 17,806.6 | 836.7 | 328.3 | 1.646 | Collision Risk Procedures Re |
| PC 1S-66-2928 20CDH - OWB - OWB | 17,900.0 | 17,875.0 | 840.0 | 329.2 | 1.644 | Collision Risk Procedures Re |
| PC 1S-66-2928 9NH - OWB - OWB | 0.0 | 15.0 | 1,936.1 | | | |
| PC 1S-66-2928 9NH - OWB - OWB | 200.0 | 202.0 | 1,937.1 | 1,934.5 | 746.765 | ES |
| PC 1S-66-2928 9NH - OWB - OWB | 3,400.0 | 3,381.5 | 2,489.0 | 2,459.5 | 84.491 | SF |
| POLLARD 1 - OWB - OWB | 13,788.3 | 7,433.1 | 1,543.5 | 1,240.4 | 5.091 | CC |
| POLLARD 1 - OWB - OWB | 13,800.0 | 7,433.0 | 1,543.6 | 1,240.2 | 5.088 | ES |
| POLLARD 1 - OWB - OWB | 13,900.0 | 7,432.4 | 1,547.6 | 1,242.8 | 5.077 | SF |
| PRAIRIE LE 31-369HC - OWB - OWB | 7,138.5 | 15,068.0 | 1,962.2 | 1,831.8 | 15.048 | CC |
| PRAIRIE LE 31-369HC - OWB - OWB | 7,150.0 | 15,070.5 | 1,962.3 | 1,831.6 | 15.008 | ES |
| PRAIRIE LE 31-369HC - OWB - OWB | 7,350.0 | 15,110.8 | 2,003.6 | 1,867.2 | 14.689 | SF |
| REASONER 1 - OWB - OWB | | | | | | Out of range |
| REASONER 1-A - OWB - OWB | 9,788.3 | 7,478.4 | 2,491.1 | 2,289.1 | 12.332 | CC |
| REASONER 1-A - OWB - OWB | 9,900.0 | 7,477.7 | 2,493.6 | 2,288.5 | 12.159 | ES, SF |
| REASONER 1A-X - OWB - OWB | | | | | | Out of range |
| SUPERS 1 - OWB - OWB | 8,465.7 | 7,447.1 | 1,141.1 | 967.8 | 6.585 | CC |
| SUPERS 1 - OWB - OWB | 8,500.0 | 7,446.9 | 1,141.6 | 967.5 | 6.557 | ES |
| SUPERS 1 - OWB - OWB | 8,600.0 | 7,446.3 | 1,149.0 | 972.5 | 6.510 | SF |

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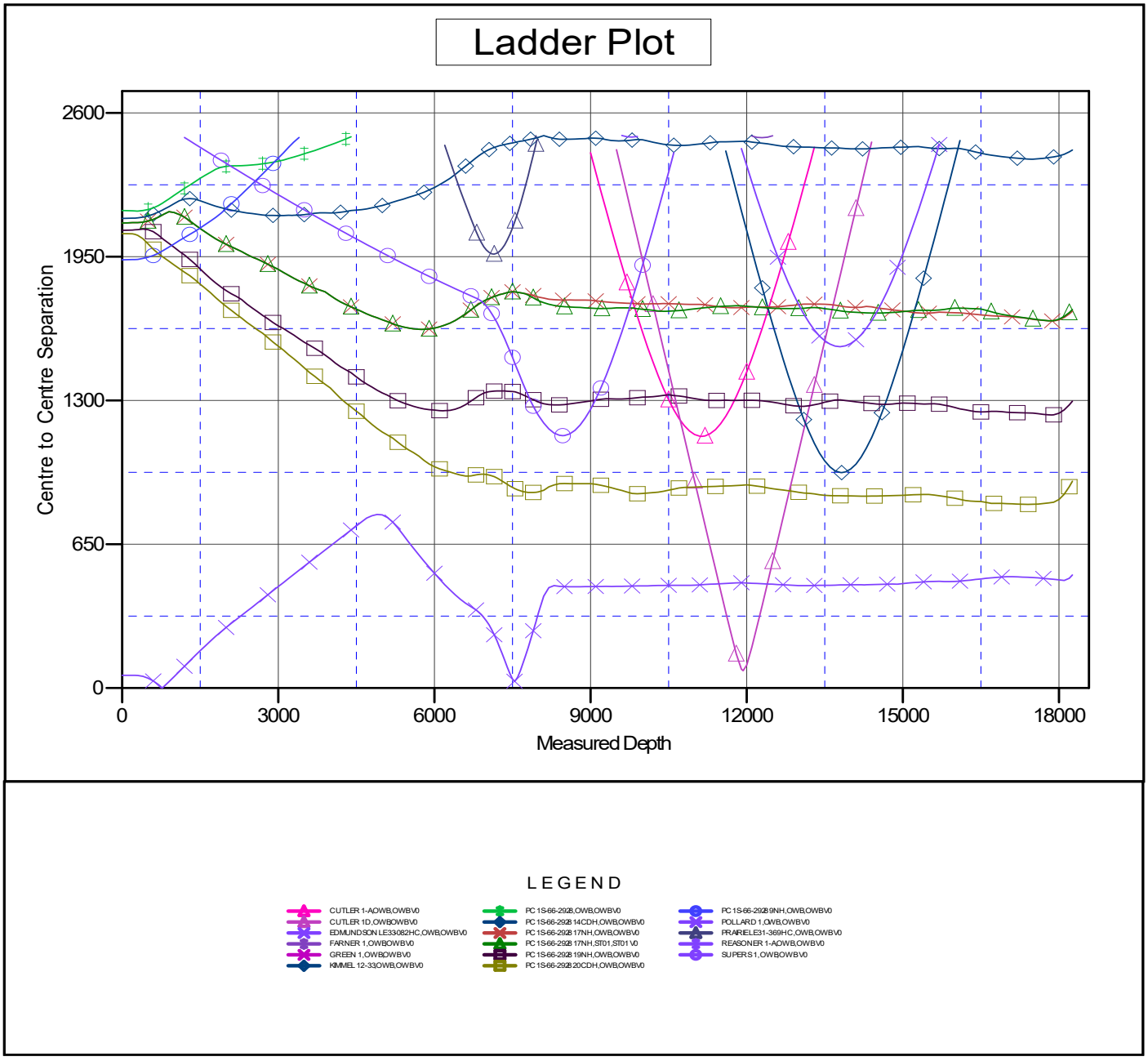
| **Reference Design:** | PLAN #1 | **Offset TVD Reference:** | Offset Datum |

| | |
|---|---|
| Reference Depths are relative to KB 25 @ 5077.0usft | Coordinates are relative to: EDMUNDSON 04NA |
| Offset Depths are relative to Offset Datum | Coordinate System is US State Plane 1983, Colorado Northern Zone |
| Central Meridian is -105.500000 | Grid Convergence at Surface is: 0.45° |



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Reference Depths are relative to KB 25 @ 5077.0usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: EDMUNDSON 04NA
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.45°