

70-025-43439

WESTERN DIVISION

PBNM

Norwalk

Thistle Unit 147H

Wellbore #1

Design #1

HOBBS OCD

OCT 19 2016

RECEIVED

Anticollision Summary Report

03 October, 2016

Devon Energy

Anticollision Summary Report

Company:	WESTERN DIVISION	Local Co-ordinate Reference:	Well Thistle Unit 147H
Project:	PBNM	TVD Reference:	RKB @ 3656.30ft
Reference Site:	Norwalk	MD Reference:	RKB @ 3656.30ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Thistle Unit 147H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000 US Production
Reference Design:	Design #1	Offset TVD Reference:	Offset Datum

Reference	Design #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 10,000.00 ft	Error Surface:	Combined Covariances
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	9/1/2016		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	17,180.26	Design #1 (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Norwalk						
Thistle Unit 129H - Wellbore #1 - Design #1	3,300.00	3,299.70	30.32	20.03	2.946	CC
Thistle Unit 129H - Wellbore #1 - Design #1	3,400.00	3,399.64	30.40	19.82	2.872	ES
Thistle Unit 129H - Wellbore #1 - Design #1	3,500.00	3,499.55	30.76	19.89	2.831	SF
Thistle Unit 130H - Wellbore #1 - Design #1	3,300.00	3,299.50	60.59	50.30	5.888	CC, ES
Thistle Unit 130H - Wellbore #1 - Design #1	17,180.26	17,628.14	967.76	778.72	5.119	SF

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

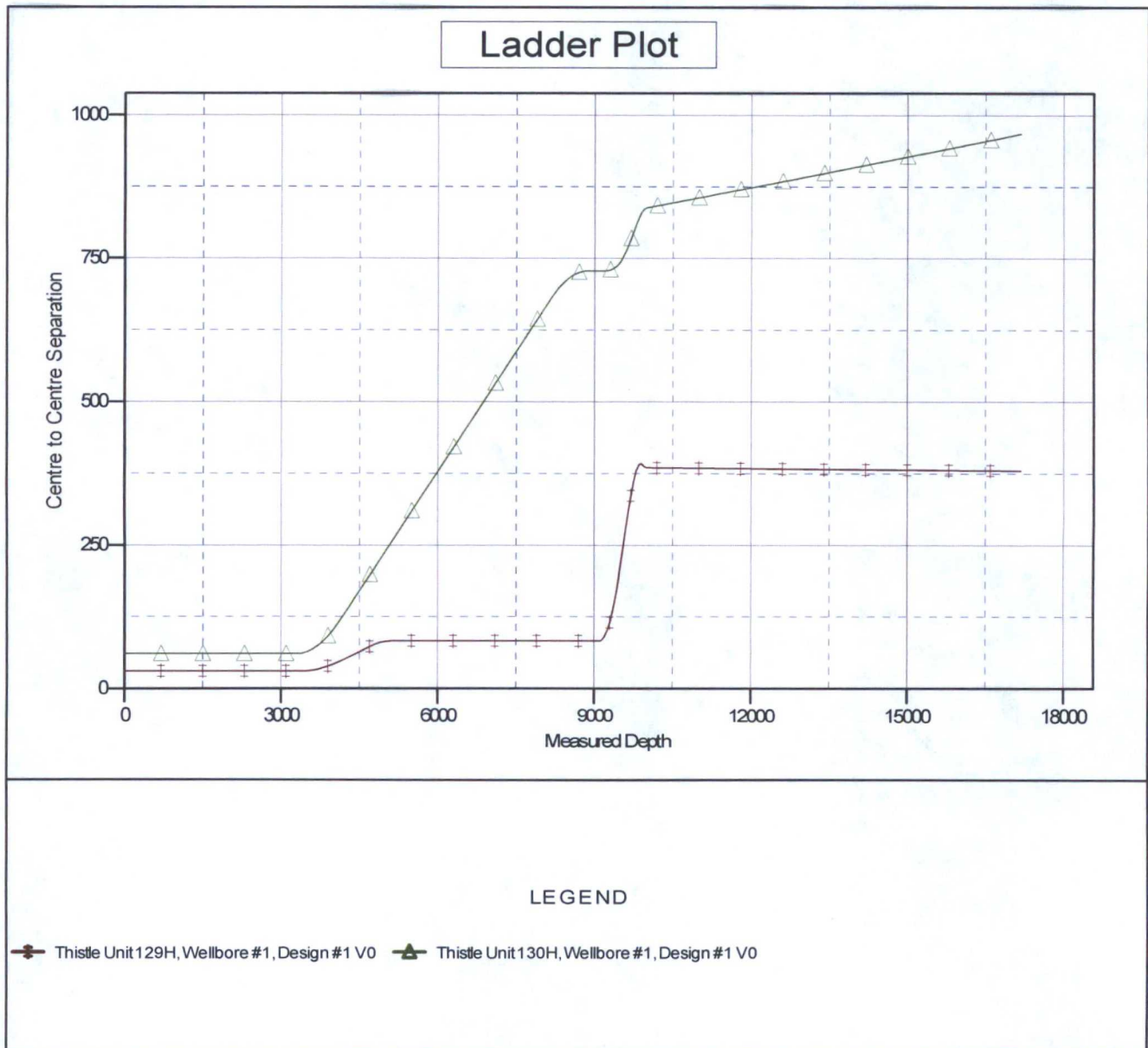
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Reference Depths are relative to RKB @ 3656.30ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Thistle Unit 147H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.41°



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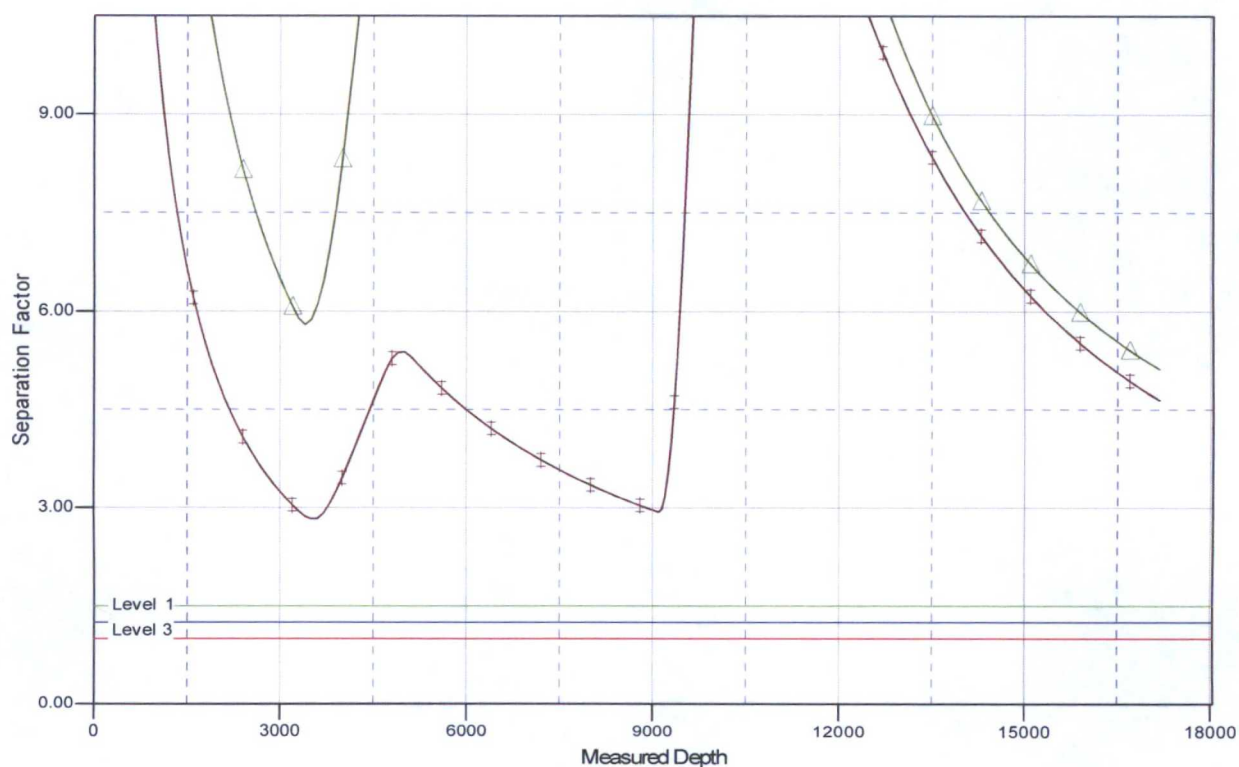
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Separation Factor Plot



LEGEND

■ Thistle Unit 129H, Wellbore #1, Design #1 V0
▲ Thistle Unit 130H, Wellbore #1, Design #1 V0