

DEVON ENERGY



devon

30-015-43049

Project: Eddy County, NM (NAD-83)
Site: Solid State 30
Well: 1
Wellbore: OH
Design: Plan #1



Azimuths to Grid North
True North: -0.05°
Magnetic North: 7.56°

Magnetic Field
Strength: 48140.4snT
Dip Angle: 60.02°
Date: 3/30/2015
Model: BGGM2014

PROJECT DETAILS: Eddy County, NM (NAD-83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL (SS30 1)	0.00	0.00	0.00	466316.39	571172.25	32° 16' 54.988 N	104° 14' 12.451 W
PBHL (SS30 1)	8800.00	0.00	0.00	466316.39	571172.25	32° 16' 54.988 N	104° 14' 12.451 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	8800.00	0.00	0.00	8800.00	0.00	0.00	0.00	0.00	0.00	

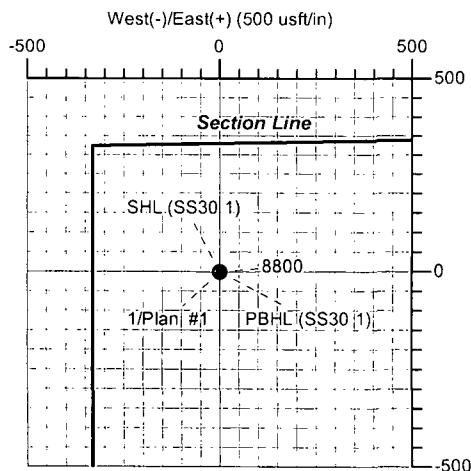
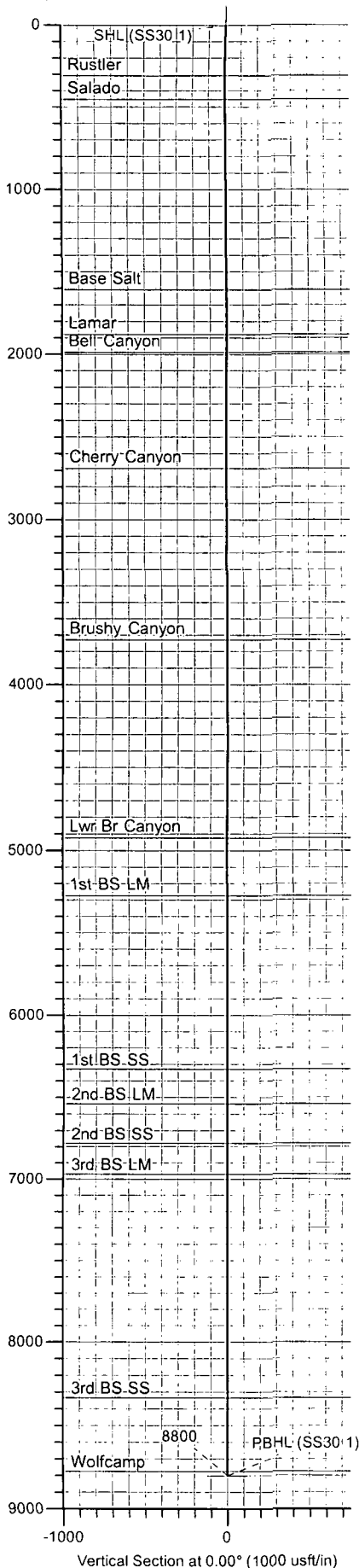
FORMATION TOP DETAILS

TVDPath	MDPath	Formation	DipAngle	DipDir
308.00	308.00	Rustler	0.00	
453.00	453.00	Salado	0.00	
1608.00	1608.00	Base Salt	0.00	
1878.00	1878.00	Lamar	0.00	
1988.00	1988.00	Bell Canyon	0.00	
2688.00	2688.00	Cherry Canyon	0.00	
3728.00	3728.00	Brushy Canyon	0.00	
4923.00	4923.00	Lwr Br Canyon	0.00	
5273.00	5273.00	1st BS LM	0.00	
6328.00	6328.00	1st BS SS	0.00	
6538.00	6538.00	2nd BS LM	0.00	
6778.00	6778.00	2nd BS SS	0.00	
6968.00	6968.00	3rd BS LM	0.00	
8333.00	8333.00	3rd BS SS	0.00	
8775.00	8775.00	Wolfcamp	0.00	

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 17 2015

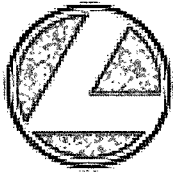
RECEIVED



South (-) / North (+) (500 usft/in)

Accepted for record
NMSD

4/28/15



LEAM
Drilling Systems, Inc.

DEVON ENERGY

Eddy County, NM (NAD-83)

Solid State 30

1

OH

Plan: Plan #1

Standard Planning Report

30 March, 2015

STANDARD
PLANNING REPORT
FORM 10-10-10
devon

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 1
Company:	DEVON ENERGY	TVD Reference:	3215.5' GL + 25' RKB @ 3240.50usft
Project:	Eddy County, NM (NAD-83)	MD Reference:	3215.5' GL + 25' RKB @ 3240.50usft
Site:	Solid State 30	North Reference:	Grid
Well:	1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Eddy County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Solid State 30			
Site Position:		Northing:	466,316.39 usft	Latitude:	32° 16' 54.988 N
From:	Map	Easting:	571,172.25 usft	Longitude:	104° 14' 12.451 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.05 °

Well	1					
Well Position	+N/-S	0.00 usft	Northing:	466,316.39 usft	Latitude:	32° 16' 54.988 N
	+E/-W	0.00 usft	Easting:	571,172.25 usft	Longitude:	104° 14' 12.451 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	3,240.50 usft	Ground Level:	3,215.50 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	3/30/2015	7.61	60.02	48,140

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

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	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	
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00	

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 1:
Company:	DEVON ENERGY	TVD Reference:	3215.5' GL + 25' RKB @ 3240.50usft
Project:	Eddy County, NM (NAD-83)	MD Reference:	3215.5' GL + 25' RKB @ 3240.50usft
Site:	Solid State 30	North Reference:	Grid
Well:	1	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
SHL (SS30 1)									
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
308.00	0.00	0.00	308.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
453.00	0.00	0.00	453.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
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
1,608.00	0.00	0.00	1,608.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
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
1,878.00	0.00	0.00	1,878.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar									
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,988.00	0.00	0.00	1,988.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
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
2,688.00	0.00	0.00	2,688.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
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
3,728.00	0.00	0.00	3,728.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									

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Site:	Solid State 30	North Reference:	Grid
Well:	1	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)
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
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
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
4,923.00	0.00	0.00	4,923.00	0.00	0.00	0.00	0.00	0.00	0.00
Lwr Br Canyon									
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
5,273.00	0.00	0.00	5,273.00	0.00	0.00	0.00	0.00	0.00	0.00
1st BS LM									
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
5,600.00	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
5,800.00	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
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,328.00	0.00	0.00	6,328.00	0.00	0.00	0.00	0.00	0.00	0.00
1st BS SS									
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,538.00	0.00	0.00	6,538.00	0.00	0.00	0.00	0.00	0.00	0.00
2nd BS LM									
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,778.00	0.00	0.00	6,778.00	0.00	0.00	0.00	0.00	0.00	0.00
2nd BS SS									
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,968.00	0.00	0.00	6,968.00	0.00	0.00	0.00	0.00	0.00	0.00
3rd BS LM									
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 1
Company:	DEVON ENERGY	TVD Reference:	3215.5' GL + 25' RKB @ 3240.50usft
Project:	Eddy County, NM (NAD-83)	MD Reference:	3215.5' GL + 25' RKB @ 3240.50usft
Site:	Solid State 30	North Reference:	Grid
Well:	1	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)	
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,333.00	0.00	0.00	8,333.00	0.00	0.00	0.00	0.00	0.00	0.00	
3rd BS SS										
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,775.00	0.00	0.00	8,775.00	0.00	0.00	0.00	0.00	0.00	0.00	
Wolfcamp										
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
PBHL (SS30 1)										

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										
SHL (SS30 1)	0.00	0.00	0.00	0.00	0.00	466,316.39	571,172.25	32° 16' 54.988 N	104° 14' 12.451 W	
- plan hits target center										
- Point										
PBHL (SS30 1)	0.00	0.00	8,800.00	0.00	0.00	466,316.39	571,172.25	32° 16' 54.988 N	104° 14' 12.451 W	
- plan hits target center										
- Point										

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
308.00	308.00	Rustler		0.00		
453.00	453.00	Salado		0.00		
1,608.00	1,608.00	Base Salt		0.00		
1,878.00	1,878.00	Lamar		0.00		
1,988.00	1,988.00	Bell Canyon		0.00		
2,688.00	2,688.00	Cherry Canyon		0.00		
3,728.00	3,728.00	Brushy Canyon		0.00		
4,923.00	4,923.00	Lwr Br Canyon		0.00		
5,273.00	5,273.00	1st BS LM		0.00		
6,328.00	6,328.00	1st BS SS		0.00		
6,538.00	6,538.00	2nd BS LM		0.00		
6,778.00	6,778.00	2nd BS SS		0.00		
6,968.00	6,968.00	3rd BS LM		0.00		
8,333.00	8,333.00	3rd BS SS		0.00		
8,775.00	8,775.00	Wolfcamp		0.00		

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 1
Company:	DEVON ENERGY	TVD Reference:	3215.5' GL + 25' RKB @ 3240.50usft
Project:	Eddy County, NM (NAD-83)	MD Reference:	3215.5' GL + 25' RKB @ 3240.50usft
Site:	Solid State 30	North Reference:	Grid
Well:	1	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		