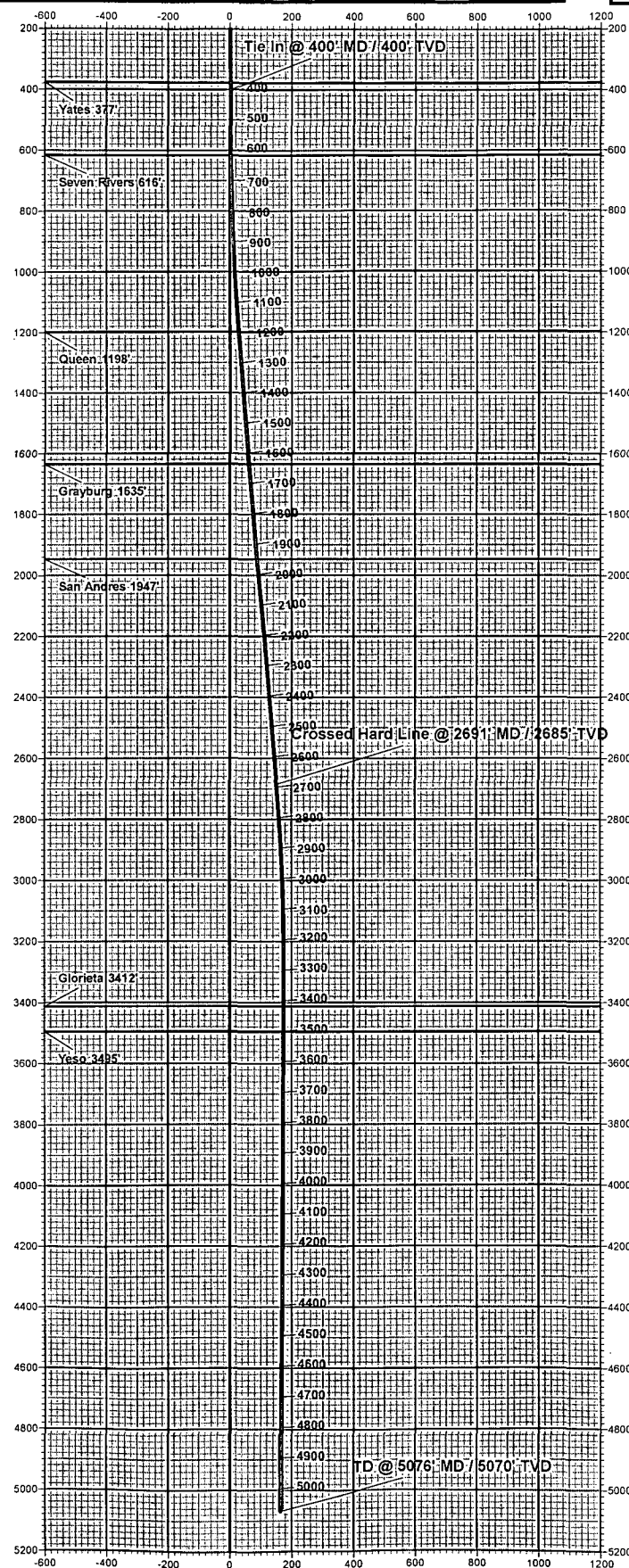


30-015-41494

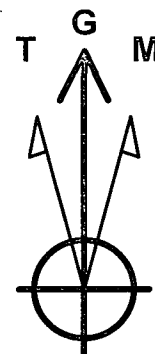
Company Name: Apache Corporation
AB State 647 #10
Eddy County, New Mexico (NAD 83)
Rig: Capstar #118
Created By: James Dawson
Date: 10/22/2013

AB State 647 #10
Eddy County, New Mexico (NAD 83)
Q130874 & WT-13816
Design #1

DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude Longitude
Target - AB State 647 #10	3200.0	-169.6	22.9	649808.30	582067.30	32° 47' 10.627 N 104° 12' 2.874 W
- plan hits target center						



Apache



Azimuths to Grid North

Correction: 7.56°

Magnetic Field

Strength: 48651.2 snT

Dip Angle: 60.54°

Date: 10/10/2013

Model: IGRF2010

RDC
The DIRECTIONAL DRILLING COMPANY

PROJECT DETAILS: Eddy County, New Mexico (NAD 83)

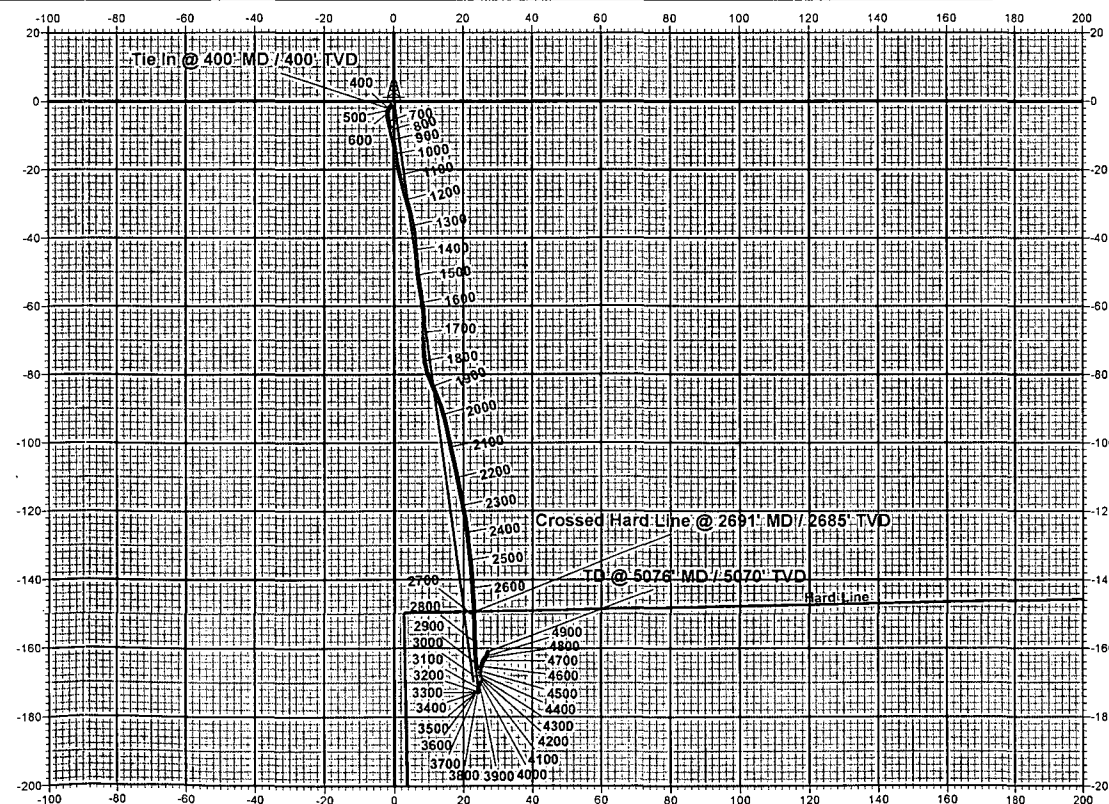
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: AB State 647 #10

Ground Level:		3677.0		Longitude	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	649977.94	582044.38	32° 47' 12.305 N	104° 12' 3.140 W

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
400.0	0.36	213.27	400.0	-2.1	-1.4	1.8	2.5	Tie in @ 400' MD / 400' TVD
2690.6	4.70	176.87	2684.8	-149.3	23.1	151.0	152.8	Crossed Hard Line @ 2691' MD / 2685' TVD
5076.0	0.50	13.20	5069.5	-161.0	27.1	163.2	189.3	TD @ 5076' MD / 5070' TVD



Vertical Section at 172.31° (200 usf/in)

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