

OCCIDENTAL PERMIAN LTD.

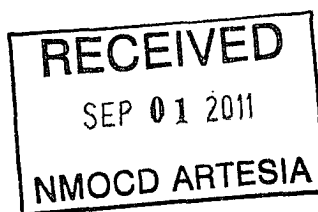
San Dunes Delaware, West

Eddy County, NM

Federal 29 #12

VH - Job #32K0311246

30-015-38231



Survey: Actual

SDI Standard Survey Report

13 April, 2011

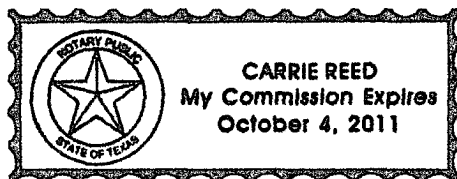
This survey is correct to the best of my knowledge and is supported by actual field data.

[Signature]

Notarized this date 14th of April, 2011.

[Signature]

Notary Signature
County of Midland
State of Texas



Scientific Drilling International, Inc.
SDI Standard Survey Report



Company:	OCCIDENTAL PERMIAN LTD	Local Co-ordinate Reference:	Well Federal 29 #12
Project:	San Dunes Delaware, West	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Well:	Federal 29 #12	North Reference:	Grid
Wellbore:	VH - Job #32K0311246	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0311246	Database:	EDM-Regulatory

Project:	San Dunes Delaware, West		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Eddy County, NM			
Site Position:		Northing:	461,972.78 usft	Latitude: 32° 16' 8.261 N
From:	Lat/Long	Easting:	664,293.31 usft	Longitude: 103° 48' 6.450 W
Position Uncertainty:	0 0 usft	Slot Radius:	0"	Grid Convergence: 0.28 °

Well:	Federal 29 #12, Directional (Baker Inteq)			
Well Position	+N-S	0.0 usft	Northing:	461,972.49 usft
	+E-W	0.0 usft	Easting:	664,243.30 usft
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft
			Ground Level:	0.0 usft

Wellbore:	VH - Job #32K0311246				
Magnetics:	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	3/17/2011	7.73	60.19	48,668

Design:	VH - Job #32K0311246			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	325.93

Survey Program	Date: 4/13/2011			
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
109.7	444.1	Actual (VH - Job #32K0311246)	Keeper	Keeper Surface Readout

Survey								
Measured Depth	Inclination	Azimuth	True Vertical	North/South	East/West	Closure Azimuth	Closure Distance	
(usft)	(°)	(°)	Depth	(usft)	(usft)	(°)	(usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0	
109.7	0.19	319.64	109.7	0.1	-0.1	319.64	0.2	
169.9	0.31	330.42	169.9	0.4	-0.3	323.59	0.4	
262.3	0.57	339.30	262.3	1.0	-0.5	331.33	1.1	
354.2	0.74	342.69	354.2	2.0	-0.9	336.06	2.2	
444.1	0.74	336.31	444.1	3.1	-1.3	337.25	3.3	



Scientific Drilling
Directional Drilling Operations

Project: San Dunes Delaware, West
Eddy County, NM
Well: Federal 29 #12
Wellbore: VH - Job #32K0311246
Design: VH - Job #32K0311246

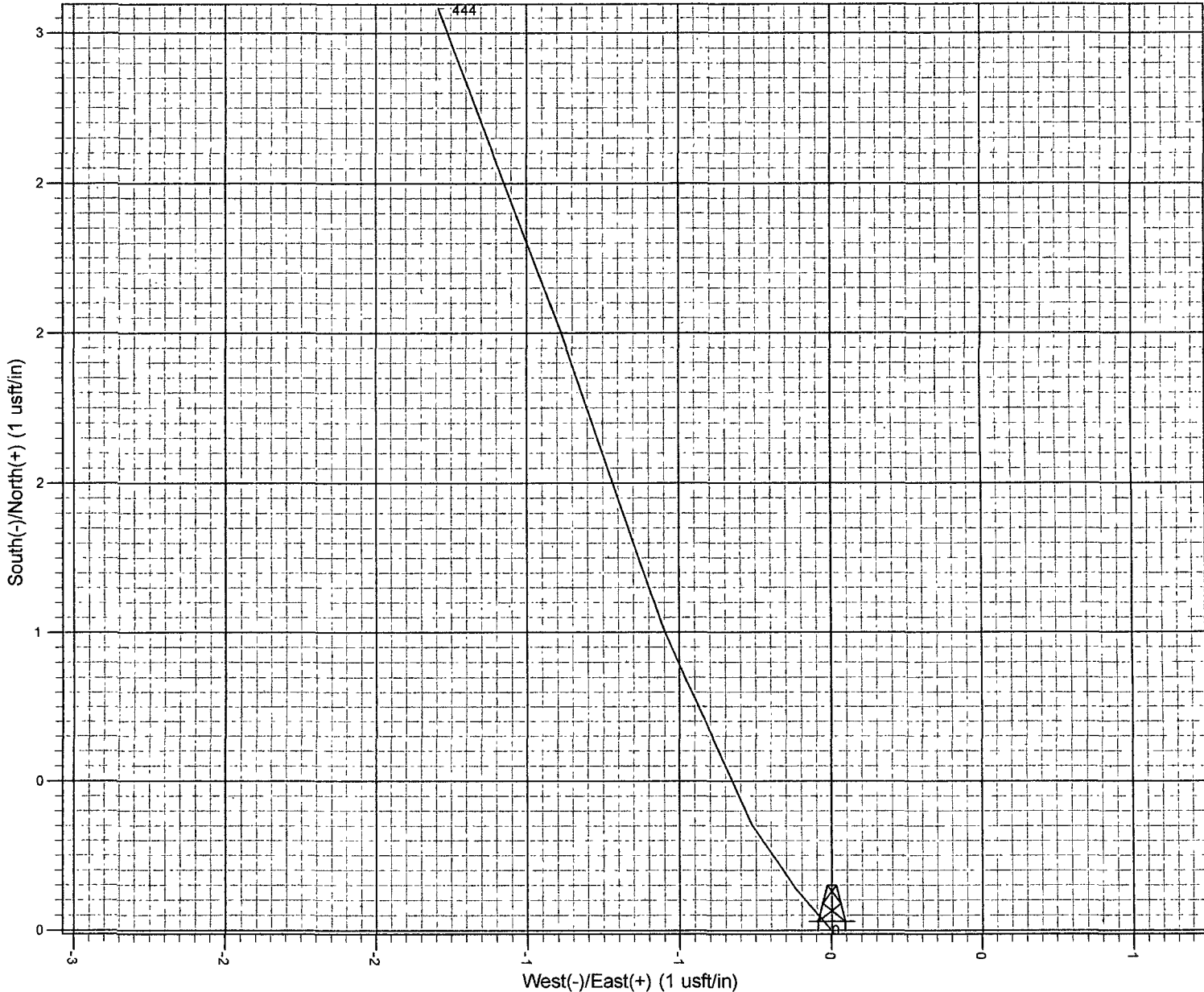


Azimuths to Grid North
True North: -0° 28'
Magnetic North: 7° 44'

Magnetic Field
Strength: 48668.4snT
Dip Angle: 60° 19'
Date: 3/17/2011
Model: IGRF2010

WELL DETAILS: Federal 29 #12
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	461972.49	664243.30	32° 16' 8.261 N	103° 48' 7.033 W	



PROJECT DETAILS: San Dunes Delaware, West
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM
Site Centre Latitude: 32° 16' 8.261 N
Longitude: 103° 48' 6.450 W
Positional Uncertainty: 0.0
Convergence: 0.28
Local North: Grid