

OCCIDENTAL PERMIAN LTD.

Atoka

Eddy County, NM

Rogers #3

VH - Job #32K0612692

30-015-39849

Survey: Gyro

SDI Standard Survey Report

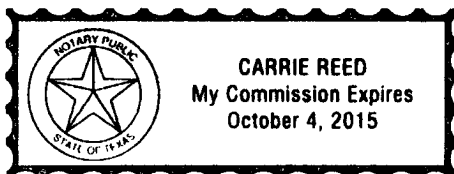
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notarized this date 18th of July, 2012.

Carrie Reed

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 Rogers #3
Project:	Atoka	TVD Reference:	WELL @ 0 00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0 00usft (Original Well Elev)
Well:	Rogers #3	North Reference:	Grid
Wellbore:	VH - Job #32K0612692	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #32K0612692	Database:	EDM-Regulatory

Project	Atoka		
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:	631,468 01 usft	Latitude:	32° 44' 9 600 N
From:	Lat/Long	Easting:	495,797 60 usft	Longitude:	104° 20' 49 200 W
Position Uncertainty:	0 00 usft	Slot Radius:	13-3/16"	Grid Convergence:	-0 01 °

Well	Rogers #3, Vertical					
Well Position	+N/-S	0 00 usft	Northing:	631,468 01 usft	Latitude:	32° 44' 9 600 N
	+E/-W	0 00 usft	Easting:	495,797 60 usft	Longitude:	104° 20' 49 200 W
Position Uncertainty		0 00 usft	Wellhead Elevation:	usft	Ground Level:	0 00 usft

Wellbore	VH - Job #32K0612692				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	06/08/12	7 86	60 50	48,765

Design		VH - Job #32K0612692		
Audit Notes:				
Version:	1 0	Phase:	ACTUAL	Tie On Depth: 0 00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0 00	0 00	0 00	331 98

Survey Program		Date	07/19/12		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
109 35	863 00	Gyro (VH - Job #32K0612692)	Keeper	Keeper Surface Readout	

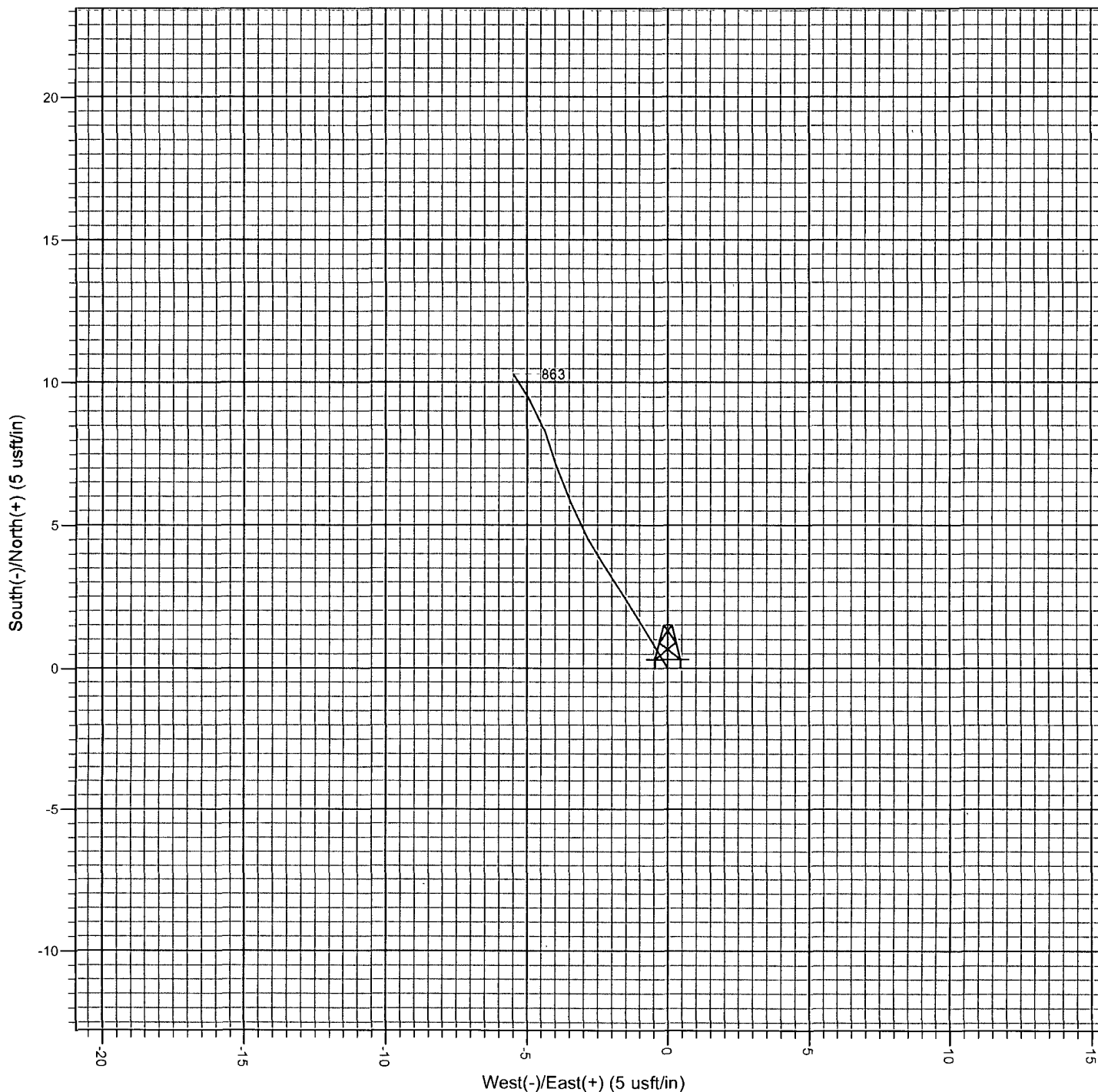
Survey							
Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
109 35	0 71	328 52	109 35	0 58	-0 35	328 52	0 68
267 35	0 88	327 61	267 33	2 44	-1 51	328 14	2 87
357 99	0 85	326 56	357 96	3 59	-2 26	327 80	4 24
431 57	0 88	329 93	431 53	4 53	-2 84	327 90	5 35
520 24	0 95	338 14	520 19	5 80	-3 46	329 21	6 75
605 93	0 91	338 39	605 87	7 09	-3 97	330 75	8 13
691 62	0 80	345 53	691 55	8 31	-4 37	332 24	9 39
777 31	0 86	323 48	777 23	9 40	-4 90	332 45	10 60
863 00	0 56	333 18	862 92	10 29	-5 48	331 98	11 66



Project: Atoka
Eddy County, NM
Well: Rogers #3
Wellbore: VH - Job #32K0612692
Design: VH - Job #32K0612692

WELL DETAILS: Rogers #3
WELL @ 0.00usft (Original Well Elev)
Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	631468.01	495797.60	32° 44' 9.600 N	104° 20' 49.200 W	



PROJECT DETAILS: Atoka	SITE DETAILS: Eddy County, NM
Geodetic System: US State Plane 1927 (Exact solution)	Site Centre Latitude: 32° 44' 9.600 N
Datum: NAD 1927 (NADCON CONUS)	Longitude: 104° 20' 49.200 W
Ellipsoid: Clarke 1866	Positional Uncertainty: 0.00
Zone: New Mexico East 3001	Convergence: -0.01
System Datum: Mean Sea Level	Local North Grid