

30-015-40820

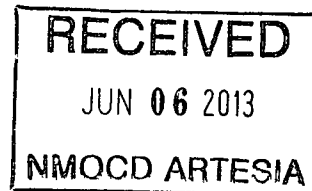
OCCIDENTAL PERMIAN LTD.

SWD

Eddy County, NM

Piglet State SWD #1

VH - Job #320113-KW-102



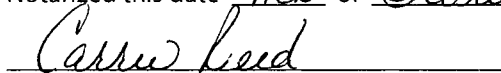
Survey: Gyro

SDI Standard Survey Report

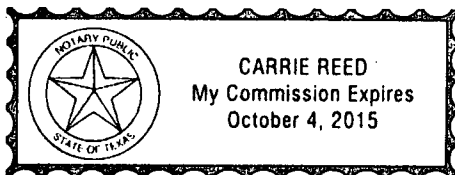
This survey is correct to the best of my knowledge and is supported by actual field data.



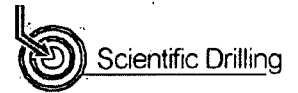
Notarized this date 11th of February, 2013.



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 Piglet State SWD #1
Project:	SWD	TVD Reference:	WELL @ 0.00usft (Original Well Elev)
Site:	Eddy County, NM	MD Reference:	WELL @ 0.00usft (Original Well Elev)
Well:	Piglet State SWD #1	North Reference:	Grid
Wellbore:	VH - Job #320113-KW-102	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320113-KW-102	Database:	EDM-Regulatory

Project	SWD		
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:	455,721.04 usft	Latitude:	32° 15' 6.202 N
From:	Lat/Long	Easting:	668,182.50 usft	Longitude:	103° 47' 21.523 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.29 °

Well		Piglet State SWD #1, Vertical				
Well Position	+N/-S	0.00 usft	Northing:	661,604.05 usft	Latitude:	32° 49' 7.468 N
	+E/-W	0.00 usft	Easting:	547,625.69 usft	Longitude:	104° 10' 41.902 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	0.00 usft

Wellbore		VH - Job #320113-KW-102			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	01/26/13	7.71	60.59	48,771

Design		VH - Job #320113-KW-102		
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	344.23

Survey Program		Date	02/05/13		
From	To	Survey (Wellbore)	Tool Name	Description	
(usft)	(usft)				
100.00	430.00	Gyro (VH - Job #320113-KW-102)	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	
100.00	0.50	318.68	100.00	0.33	-0.29	318.68	0.44	
200.00	0.50	219.70	200.00	0.32	-0.85	290.50	0.91	
300.00	0.55	51.82	299.99	0.28	-0.76	290.36	0.81	
400.00	0.22	31.95	399.99	0.74	-0.28	339.45	0.79	
430.00	0.13	27.21	429.99	0.82	-0.23	344.23	0.85	

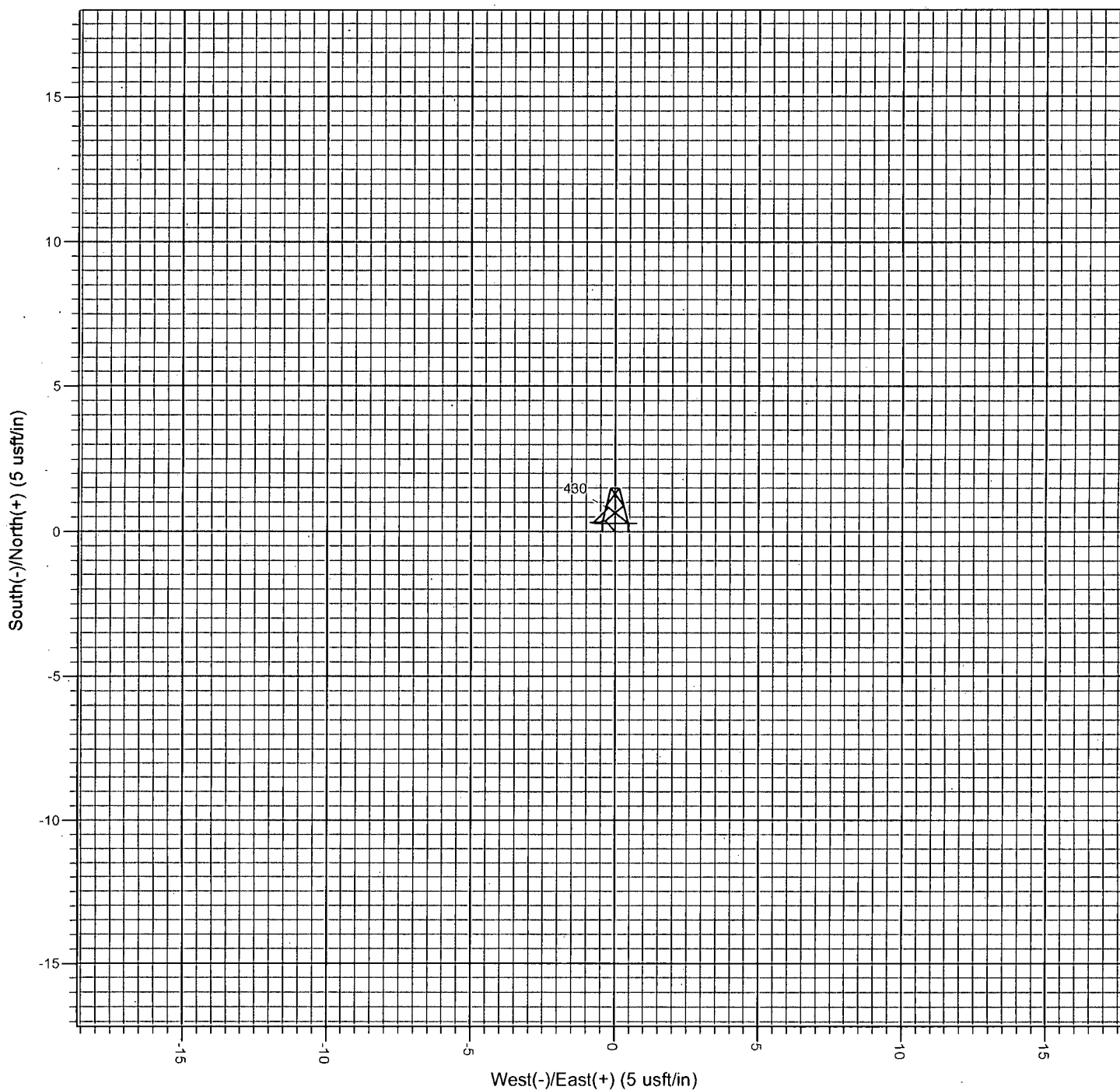


Scientific Drilling

Project: SWD
Eddy County, NM
Well: Piglet State SWD #1
Wellbore: VH - Job #320113-KW-102
Design: VH - Job #320113-KW-102

WELL DETAILS: Piglet State SWD #1
WELL @ 0.00usft (Original Well Elev)
Ground Level: 0.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	661604.05	547625.69	32° 49' 7.468 N	104° 10' 41.902 W	



PROJECT DETAILS: SWD		SITE DETAILS: Eddy County, NM	
Geodetic System: US State Plane 1927 (Exact solution)	Datum: NAD 1927 (NADCON CONUS)	Site Centre Latitude: 32° 15' 6.202 N	Longitude: 103° 47' 21.523 W
Ellipsoid: Clarke 1866	Zone: New Mexico East 3001	Positional Uncertainty: 0.00	Convergence: 0.29
System Datum: Mean Sea Level		Local North: Grid	