Oiffield Services, Central U.S. Land

Reservoir Development

Drilling & Measurements (Extreme Engineering)

6724 Corporation Pkwy Suite 100

Fort Worth, TX 76126 Phone: (817) 717-1820 (817) 546-7551 Fax:

30-015-40675

December 11, 2012

Occidental Permian Ltd 5 Greenway Plaza Suite 110 Houston, Texas77046

RECEIVED MAY 1 3 2013 NMOCD ARTESIA

Attention: Anthony Tschacher

Re:

CLIENT:

OXY Permain

WELL:

Chris Robin 20 Fed 10

FIELD:

Permain Basin

RIG:

Savanna 415

COUNTY: Eddy

API NO:

30-015-40675

JOB NO:

NM-OXY-0022

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements (formerly Extreme), a division of Schlumberger Technology Corporation (P-5 No. 754900). Other information required by your office is as follows.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths	· <u>Dates Performed</u>	Type of Survey
Tim Daws	Chris Robin 20 Fed 10	131.00 Ft to	November 13, 2012 to	SlimPulse
FST-1	Original Hole	4772.00 Ft	November 18, 2012	

A plat of the bottom hole location is oriented both to the surface location and to the lease lines (or until line in case of pooling), is attached to the survey report.

If any other information is required, please contact the undersigned at the above letterhead and phone number.

Sincerely,

Mike Johns

Field Service Manager

CC: OXY Permain Enclosures: [2] County of Eddy State of New Mexico Oilfield Services, Central U.S. Land

Schlumberger

Reservoir Development

Drilling & Measurements (Extreme Engineering) 6724 Corporation Pkwy Suite 100

Fort Worth, TX 76126 Phone: (817) 717-1820 Fax: (817) 546-7551

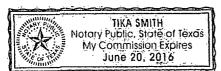
I, Tim Daws certify that; I am employed by Drilling & Measurements (formerly Extreme), a division of Schlumberger Technology Corporation; that I did on the day(s) of November 13, 2012 through November 18, 2012, conduct or supervise the taking of the SlimPulse surveys from a depth of 131.00 feet to a depth of 4772.00 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of OXY Permain for the Chris Robin 20 Fed 10 Well (Original Hole) API No. 30-015-40675 in New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

Tim Daws FST-1

Before me, a notary public, on this day personally appeared 100 1000, known to me to be the person whose name is subscribed to the foregoing document and, being by me first duly sworn, declared that the statements therein contained are true and correct.

Given under my hand and seal of office this 12th day of December 2012

Notary Rublic's Signature



CHRIS ROBIN 20 FED 10 MWD 0' to 4772' Survey Report

3

(Def Survey

		(ac. cm; co)	
Report Date:	November 18, 2012 - 07:45 AM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client	Oxy	Vertical Section Azimuth:	6,000 (Grid North)
Field:	Eddy (NAD27) 2011	Vertical Section Origin:	0 000 ft 0 000 ft
Structure / Slot:	OXY, PERMIN (CHRIS ROBIN 20 FED 10) SAVANNA 415 / CHRIS ROBIN 20 FED 10	TVD Reference Datum:	RKB.
Well:	CHRIS ROBIN 20 FED 10	TVD Reference Elevation:	3635,000 ft above Unknown
Borehole:	Original Hole	Scabed / Ground Elevation:	3621,000 ft above Unknown
UNI I APH	Unimovn (30-015-40675	Magnetic Declination:	7.880°
Survey Name:	CHRIS ROBIN 20 FED 10 WAYD O' to 4772	Total Field Strength:	48745 407 nT
Survey Date:	November 18, 2012	Magnetic Dip Angle:	60,545 *
Tort / AHD / DDI / ERD Ratio:	14.813 1/115.235 N./ 3.235 / 0 024	Declination Date:	November 18, 2012
Coordinate Reference System:	NA027 Universal Transverse Mercator, Zone 13 North, US Feet	Magnetic Declination Model:	BGGM 2011
Location Lat / Long:	N 32-49 18.84000; W 104: 12 0.00000	North Reference:	Grid North
Location Grid NIE YIX:	N 11914792, 112 (ÜS; E 1686102 168 ftUS	Grid Convergence Used:	0,072 *
CRS Grid Convergence Angle:	0.43364375 •	Total Corr Mag North-Crid	7.817
Grid Scale Factor:	0.99966915	Local Coord Referenced To:	Structure Reference Point

Survey Type:	Comments Surface Surface Surveys Surveys Surveys	Comments
Det Survey	131.00 133.00 13	**
uv <i>ey</i>	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	inc)
	Azim Gid 0.83 10.83 249,20 249,20 249,20 249,20 259,17 269,17	Azim Grid
	1910 28897 48488 88588 88588 114055 114055 161458 161458 161455 16145 16145 161455 16145 16145 16145 16145 16145 16145 16145 16145 16145 161455 16145	e v
	VSEC 016 016 016 016 016 016 016 016 016 016	VSEC
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	e S
	EW 0.000 1.0	. P
	DLS. (779000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (7790000).5 (77900000).5 (77900000).5 (77900000).5 (77900000).5 (77900000).5 (779000000).5 (779000000).5 (7790000000).5 (7790000000).5 (7790000000).5 (779000000000).5 (77900000000000).5 (77900000000000000000000000000000000000	DLS
	Nothing Nothin	Northing
	Essaino (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	
	12.00 (1.00) 22.00	Latitude
	Congline	Longitude

Survey Error Model: Survey Program: Description

ISCNSA Rev 0 *** 3-D 95,000% Con

ence 2.7955 sigma

MD From 0,000 14,000

MĎ, I o (M) 14,000 14,000 4772,000

Act Sins
Act Sins
Act Sins

Onginal Hole / CHRIS ROBIN 20 PED 10 MWD 0 to 4772 Original Hole / CHRIS ROBIN 20 PED 10 MWD 0 to 4772 Original Hole / CHRIS ROBIN 20 PED 10 MWD 0 to 4772