

Oilfield Services, Central U.S. Land

Reservoir Development

PathFinder, a Schlumberger Company
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127USA
Phone: (405) 789-1515
Fax: (405) 789-1519

HOBBSOCD

JAN 22 2015

RECEIVED

PATHFINDER
A Schlumberger Company

December 3, 2014

Cimarex
600 N MARIENFELD STREET SUITE 600

MIDLAND ,TX 79701

Re:

CLIENT: Cimarex Energy Co
WELL: Dos Equis 11 Federal COM 2H ST01
FIELD: Triste Draw
RIG: Cactus 104
COUNTY: Lea
API NO: 30-025-41470-01
JOB NO: 14MLD0375

Sec 11, T24S, R32E Lea NM
N 32.23853 W 103.64213

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation .
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Kurt Valentine MWD	Dos Equis 11 Federal COM 2H ST01 Side Track	10428.00 Ft to 15174.00 Ft	September 19, 2014 to September 28, 2014	SlimPulse

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

Joseph Hogan
Field Service Manager

FEB 26 2015

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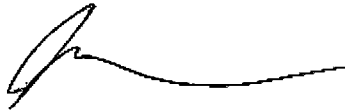
Well Reference:

Sec 11, T24S, R32E Lea NM
N 32.23853 W 103.64213

I, Kurt Valentine certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of September 19, 2014 through September 28, 2014, conduct or supervise the taking of the SlimPulse surveys from a depth of 10428.00 feet to a depth of 15174.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by PathFinder, 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 Cimarex Energy Co for the Dos Equis 11 Federal COM 2H ST01 Well (Side Track) API No. 30-025-41470-01 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by PathFinder, a division of Schlumberger Technology Corporation.

SIGNED ON BEHALF OF KURT VALENTINE BY JOE HOGAN

By
Kurt Valentine
MWD



Subscribed and Sworn to before me this 2 day of December (month) 2014 (yr)

My Commission expires:

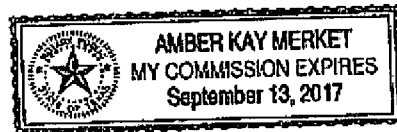
September 13, 2017

Amber Kay Market

Notary Public

(signature)

Midland County, Texas
(County State)



SCHLUMBERGER
Survey Report

3-Dec-2014

Client.....: Cimarex
Field.....: Triste Draw
Well.....: Dees Equis 11 Federal 2H
API number.....: 30-025-41470-01
Engineer.....: Kurt Valentine
County.....: Lea County, NM
State.....: New Mexico
Rig.....: Cactus Rig 104

Spud date.....: 31-Aug-14
Last survey date.....: 28-Sep-14
Total accepted surveys.....: 71
MD of first survey.....: 10428.00 ft
MD of last survey.....: 15174.00 ft
Latitude.....: 32° 14' 18.773" N
Longitude.....: 103° 38' 31.665" W

Survey calculation methods.....
Method for positions.....: Minimum curvature
Method for DLS.....: Lubinski

Depth reference.....: MSL
Permanent datum.....: MSL
Depth reference.....: Driller's Depth
GI above permanent.....: 3608.00
KB above permanent.....: 3628.00
DF above permanent.....: 3628.00

Vertical section origin.....
Latitude (+N/S).....: 0.00 ft
Departure (+E/W).....: 0.00 ft

Grid Coordinates.....
NAD27 Texas State Plane, Central Zone, US Feet
X.....: 755048.20 ft
Y.....: 451205.00 ft

Azimuth from Vsect Origin to target: 183.87 degrees

MWD Survey Reference Criteria

Run1..... Calculation Date: 18-Sep-2014
Location G.....: 998.82825 mgn Tolerance G.....: 2.50 mgn
Location B.....: 48249.97 nT Tolerance B.....: 300.00 nT
Magnetic Dip: 60.0998 degrees Tolerance Dip: 0.45 degrees

Run2..... Calculation Date: 20-Sep-2014
Location G.....: 998.82825 mgn Tolerance G.....: 2.50 mgn
Location B.....: 48249.3 nT Tolerance B.....: 300.00 nT
Magnetic Dip: 60.09965 degrees Tolerance Dip: 0.45 degrees

Run3..... Calculation Date: 23-Sep-2014
Location G.....: 998.82825 mgn Tolerance G.....: 2.50 mgn
Location B.....: 48248.28 nT Tolerance B.....: 300.00 nT
Magnetic Dip: 60.09943 degrees Tolerance Dip: 0.45 degrees

Run4..... Calculation Date: 26-Sep-2014
Location G.....: 998.82825 mgn Tolerance G.....: 2.50 mgn
Location B.....: 48247.27 nT Tolerance B.....: 300.00 nT
Magnetic Dip: 60.09921 degrees Tolerance Dip: 0.45 degrees

8GGM Model: 2014

Run1.....
Magnetic dec (+E/W).....: 7.38089 degrees
Grid Conv (+E/W).....: 0.36873 degrees
Total Azim Corr (+E/W).....: 7.01216 degrees

Run2.....
Magnetic dec (+E/W).....: 7.38035 degrees
Grid Conv (+E/W).....: 0.36873 degrees
Total Azim Corr (+E/W).....: 7.01162 degrees

Run3.....
Magnetic dec (+E/W).....: 7.37955 degrees
Grid Conv (+E/W).....: 0.36874 degrees
Total Azim Corr (+E/W).....: 7.01081 degrees

Run4.....
Magnetic dec (+E/W).....: 7.37874 degrees
Grid Conv (+E/W).....: 0.36873 degrees
Total Azim Corr (+E/W).....: 7.01001 degrees

Survey Correction Index Description

U = Uncorrected S = Sag Corre.ccd 7 = Proj. to Bit
1 = DMAG Corrected 3 = Sag + DMAG Corrected

