Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| Marcel Boucher | 08/04/2004 |
| Aaron Schen | 08/04/2004 |
| Craig Ivie | 08/04/2004 |
| Brian Jarvis | 08/04/2004 |

RECEIVING PARTY DATA

| Name: | ReedHycalog, L.P. | |
|-----------------|-------------------------------|--|
| Street Address: | 400 N Sam Houston Pkwy E #900 | |
| City: | Houston | |
| State/Country: | TEXAS | |
| Postal Code: | 77060 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 10711589 |

CORRESPONDENCE DATA

Fax Number: (281)878-5720

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

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Email: jayne.sippl@grantprideco.com

Correspondent Name: Jayne Sippl

Address Line 1: 400 N Sam Houston Pkwy E #900

Houston, TEXAS 77060 Address Line 4:

NAME OF SUBMITTER: Jayne Sippl

Total Attachments: 3

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PATENT

500030593 **REEL: 015989 FRAME: 0495**

ASSIGNMENT

WHEREAS, we, Marcel Boucher, Aaron Schen, Craig Ivie, residents and citizens of the United States, and Brian Jarvis, resident and citizen of the United Kingdom, have made an invention in "Apparatus for Weight on Bit Measurements, and Methods of Using Same," for which we have executed an application for United States Letters Patent, Serial No. 10/605,627 on October 15, 2003;

WHEREAS, we represent and warrant that we are the sole owners of said invention and application for Letters Patent;

WHEREAS, ReedHycalog, L.P., of 1330 Post Oak Boulevard, Suite 2700, Houston, Texas 77056, hereinafter referred to as "ASSIGNEE", is desirous of acquiring all rights, title and interest in the same;

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00) and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by us, we have assigned, sold, transferred and set over and by these presents do assign, sell, transfer and set over unto said ASSIGNEE all rights, title and interest in and to (a) said invention and world-wide rights therein, (b) said application, including all divisions, continuations, continuations-in-part and substitutions thereof, and (c) all United States and foreign patents which shall issue on said invention, including all reissues, renewals and extensions thereof, for the United States, its territories and possessions and all foreign countries, including the right to file applications for Letters Patent on said invention in any and all foreign countries, the same to be held and enjoyed by said ASSIGNEE, its assigns and successors, as fully and entirely as the same would have been held and enjoyed by us, had this assignment and sale not been made.

We covenant and agree that we will, at any time upon the request and at the expense of said ASSIGNEE, execute and deliver any and all papers and do all lawful acts that may be necessary or desirable, in the opinion of said ASSIGNEE, to enable and assist said ASSIGNEE (a) obtain Letters Patent, both domestic and foreign, on said invention, (b) establish, maintain and secure title in said ASSIGNEE, its successors and assigns to said invention, application and Letters Patent, including making such title of lawful public record, and (c) defend, establish or otherwise preserve the validity of said Letters Patent against any and all infringers, and perform such other acts as necessary to give full force and effect to this assignment.

We hereby authorize and request the Commissioner of Patents of the United States to issue all Letters Patent based on said application and all said divisions, continuations, continuations-in-part, reissues, renewals and extensions to said ASSIGNEE, its successors and assigns.

PATENT REEL: 015989 FRAME: 0496

| IN TESTIMONY WHEREOF, I ha | ave duly execut | ed this assignment on this day of day of Marcel Boucher |
|--|----------------------|--|
| STATE OF TEXAS COUNTY OF HARRIS | § § | |
| known to be the person whose nam | ne is subscribed | day personally appeared Marcel Boucher, to the foregoing instrument, and rethe purposes and consideration expressed |
| GIVEN UNDER MY HAND AND | SEAL OF OF | FICE THIS, 2004. |
| KATHY A. DEAN KATHY A. DEAN NOTARY PUBLIC, STATE OF TEXAS MY COMMISSION EXPIRES FEB. 6, 2007 | | Notary Public in and for the State of Texas |
| IN TESTIMONY WHEREOF, I ha | ave duly execut | A Sch |
| STATE OF TEXAS COUNTY OF HARRIS | § § | |
| BEFORE ME, the undersigned aut be the person whose name is subsc that he executed the same for the p | ribed to the for | day personally appeared Aaron Schen, known to egoing instrument, and acknowledged to me nsideration expressed therein. |
| GIVEN UNDER MY HAND AND | SEAL OF OF | FICE THIS day of, 2004. Notary Public in and for the State of Texas |
| KATHY A. DEAN NOTARY PUBLIC, STATE OF TE: MY COMMISSION EXPIRES FEB. 6, 2007 | XAS X | |

PATENT REEL: 015989 FRAME: 0497

| IN TESTIMONY WHEREOF, I h | nave duly executed this assignment on this 30 ⁷⁵ day of Craig Ivie |
|------------------------------------|---|
| STATE OF TEXAS COUNTY OF HARRIS | § § |
| the person whose name is subscrib | thority, on this day personally appeared Craig Ivie, known to be sed to the foregoing instrument, and acknowledged to me that oses and consideration expressed therein. |
| GIVEN UNDER MY HAND ANI | O SEAL OF OFFICE THIS 30th ay of June, 2004. |
| | Notary Public In and for the State of Texas |
| | KATHY A. DEAN NOTARY PUBLIC, STATE OF TEXAS MY COMMISSION EXPIRES FEB. 6, 2007 |
| IN TESTIMONY WHEREOF, I ha | ave duly executed this assignment on this the day of Brian Jarvis |

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RECORDED: 05/10/2005