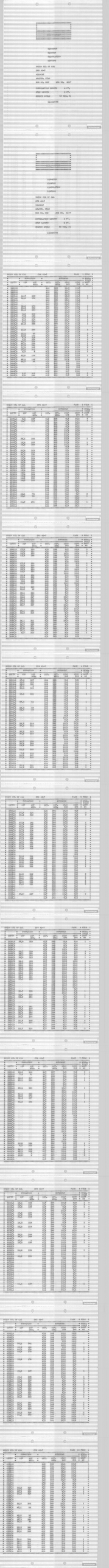

GL04377

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                   *----------------------*
                   *-----SCHLUMBERGER-----*
                   *----------------------*
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          SCHLUMBERGER DIRECTIONAL SURVEY


          UNION OIL OF CAL

          CFS 42-7

          WILDCAT

          BEAVER COUNTY,UTAH

          RUN NO. 1      3357 - 6004

          MARCH  1, 1978

          START OF SURVEY IS CASING AT  3357 FT.

          TANGENTIAL METHOD




                    REFERENCE JOB   4107.
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REF   4107.                                                          PAGE   1
*****************************************************************************
*          *           *          * TRUE     *    CO-ORDINATES      *        *
*  DEPTH   * DEVIATION * AZIMUTH  * VERTICAL *********************** COURSE *
*  FEET    *  DEGREES  * DEGREES  * DEPTH    * + NORTH * + EAST    * LENGTH *
*          *           *          * FEET     * - SOUTH * - WEST    * FEET   *
*****************************************************************************
*  3357.0  *    6.0    *  302.0   *  3357.0  *   -0.0  *     0.0   *   0.0  *
*  3360.0  *    6.0    *  353.0   *  3360.0  *    0.2  *    -0.3   *   0.3  *
*  3370.0  *    6.0    *  329.8   *  3369.9  *    0.7  *    -1.2   *   1.4  *
*  3380.0  *    6.0    *  306.6   *  3379.9  *    1.3  *    -2.0   *   2.4  *
*  3390.0  *    6.0    *  304.0   *  3389.8  *    1.9  *    -2.9   *   3.4  *
*  3400.0  *    6.0    *  304.0   *  3399.8  *    2.4  *    -3.8   *   4.5  *
*  3410.0  *    6.0    *  305.0   *  3409.7  *    3.0  *    -4.6   *   5.5  *
*  3420.0  *    6.0    *  301.0   *  3419.7  *    3.6  *    -5.5   *   6.6  *
*  3430.0  *    6.0    *  302.0   *  3429.6  *    4.1  *    -6.4   *   7.6  *
*  3440.0  *    6.1    *  302.0   *  3439.5  *    4.7  *    -7.3   *   8.7  *
*  3450.0  *    6.1    *  303.0   *  3449.5  *    5.3  *    -8.2   *   9.8  *
*  3460.0  *    6.1    *  304.0   *  3459.4  *    5.9  *    -9.1   *  10.8  *
*  3470.0  *    6.2    *  305.0   *  3469.4  *    6.5  *   -10.0   *  11.9  *
*  3480.0  *    6.2    *  303.0   *  3479.3  *    7.1  *   -10.9   *  13.0  *
*  3490.0  *    6.2    *  301.0   *  3489.3  *    7.6  *   -11.8   *  14.1  *
*  3500.0  *    6.3    *  300.0   *  3499.2  *    8.2  *   -12.8   *  15.2  *
*  3510.0  *    6.3    *  300.0   *  3509.1  *    8.7  *   -13.7   *  16.2  *
*  3520.0  *    6.3    *  298.0   *  3519.1  *    9.2  *   -14.7   *  17.3  *
*  3530.0  *    6.4    *  299.0   *  3529.0  *    9.8  *   -15.6   *  18.5  *
*  3540.0  *    6.4    *  300.0   *  3538.9  *   10.3  *   -16.6   *  19.6  *
*  3550.0  *    6.4    *  300.0   *  3548.9  *   10.9  *   -17.6   *  20.7  *
*  3560.0  *    6.5    *  297.0   *  3558.8  *   11.4  *   -18.6   *  21.8  *
*  3570.0  *    6.5    *  296.0   *  3568.8  *   11.9  *   -19.6   *  22.9  *
*  3580.0  *    6.5    *  295.0   *  3578.7  *   12.4  *   -20.6   *  24.1  *
*  3590.0  *    6.5    *  296.0   *  3588.6  *   12.9  *   -21.6   *  25.2  *
*  3600.0  *    6.5    *  295.0   *  3598.6  *   13.4  *   -22.7   *  26.3  *
*  3610.0  *    6.5    *  295.0   *  3608.5  *   13.8  *   -23.7   *  27.4  *
*  3620.0  *    6.5    *  295.0   *  3618.4  *   14.3  *   -24.7   *  28.6  *
*  3630.0  *    6.6    *  295.0   *  3628.4  *   14.8  *   -25.8   *  29.7  *
*  3640.0  *    6.6    *  295.0   *  3638.3  *   15.3  *   -26.8   *  30.9  *
*  3650.0  *    6.6    *  294.0   *  3648.2  *   15.8  *   -27.9   *  32.0  *
*  3660.0  *    6.6    *  294.0   *  3658.2  *   16.2  *   -28.9   *  33.2  *
*  3670.0  *    6.6    *  293.0   *  3668.1  *   16.7  *   -30.0   *  34.3  *
*  3680.0  *    6.6    *  294.0   *  3678.0  *   17.1  *   -31.0   *  35.4  *
*  3690.0  *    6.6    *  293.0   *  3688.0  *   17.6  *   -32.1   *  36.6  *
*  3700.0  *    6.6    *  294.0   *  3697.9  *   18.1  *   -33.1   *  37.7  *
*  3710.0  *    6.6    *  291.0   *  3707.8  *   18.5  *   -34.2   *  38.9  *
*  3720.0  *    6.6    *  289.0   *  3717.8  *   18.8  *   -35.3   *  40.0  *
*  3730.0  *    6.6    *  291.0   *  3727.7  *   19.3  *   -36.4   *  41.1  *
*  3740.0  *    6.6    *  291.0   *  3737.6  *   19.7  *   -37.4   *  42.3  *
*  3750.0  *    6.6    *  290.0   *  3747.6  *   20.1  *   -38.5   *  43.4  *
*  3760.0  *    6.7    *  290.0   *  3757.5  *   20.5  *   -39.6   *  44.6  *
*  3770.0  *    6.7    *  290.0   *  3767.4  *   20.9  *   -40.7   *  45.7  *
*  3780.0  *    6.7    *  291.0   *  3777.4  *   21.3  *   -41.8   *  46.9  *
*  3790.0  *    6.7    *  291.0   *  3787.3  *   21.7  *   -42.9   *  48.1  *
*  3800.0  *    6.7    *  291.0   *  3797.2  *   22.1  *   -44.0   *  49.2  *
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REF   4107.                                                          PAGE   2
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*          *           *          * TRUE     *    CO-ORDINATES      *        *
*  DEPTH   * DEVIATION * AZIMUTH  * VERTICAL *********************** COURSE *
*  FEET    *  DEGREES  * DEGREES  * DEPTH    * + NORTH * + EAST    * LENGTH *
*          *           *          * FEET     * - SOUTH * - WEST    * FEET   *
*****************************************************************************
*  3810.0  *    6.7    *  292.0   *  3807.2  *   22.5  *   -45.1   *  50.4  *
*  3820.0  *    6.7    *  293.0   *  3817.1  *   23.0  *   -46.1   *  51.5  *
*  3830.0  *    6.7    *  293.0   *  3827.0  *   23.5  *   -47.2   *  52.7  *
*  3840.0  *    6.7    *  293.0   *  3837.0  *   23.9  *   -48.3   *  53.9  *
*  3850.0  *    6.7    *  294.0   *  3846.9  *   24.4  *   -49.3   *  55.0  *
*  3860.0  *    6.7    *  292.0   *  3856.8  *   24.8  *   -50.4   *  56.2  *
*  3870.0  *    6.7    *  293.0   *  3866.8  *   25.3  *   -51.5   *  57.4  *
*  3880.0  *    6.7    *  294.0   *  3876.7  *   25.8  *   -52.6   *  58.5  *
*  3890.0  *    6.7    *  296.0   *  3886.6  *   26.3  *   -53.6   *  59.7  *
*  3900.0  *    6.7    *  296.0   *  3896.6  *   26.8  *   -54.7   *  60.9  *
*  3910.0  *    6.7    *  297.0   *  3906.5  *   27.3  *   -55.7   *  62.0  *
*  3920.0  *    6.7    *  299.0   *  3916.4  *   27.9  *   -56.7   *  63.2  *
*  3930.0  *    6.7    *  298.0   *  3926.3  *   28.4  *   -57.8   *  64.4  *
*  3940.0  *    6.7    *  298.0   *  3936.3  *   29.0  *   -58.8   *  65.5  *
*  3950.0  *    6.7    *  298.0   *  3946.2  *   29.5  *   -59.8   *  66.7  *
*  3960.0  *    6.7    *  295.0   *  3956.1  *   30.0  *   -60.9   *  67.9  *
*  3970.0  *    6.7    *  295.0   *  3966.1  *   30.5  *   -61.9   *  69.0  *
*  3980.0  *    6.7    *  294.0   *  3976.0  *   31.0  *   -63.0   *  70.2  *
*  3990.0  *    6.7    *  294.0   *  3985.9  *   31.5  *   -64.1   *  71.4  *
*  4000.0  *    6.7    *  293.0   *  3995.9  *   31.9  *   -65.1   *  72.5  *
*  4010.0  *    6.7    *  293.0   *  4005.8  *   32.4  *   -66.2   *  73.7  *
*  4020.0  *    6.7    *  292.0   *  4015.7  *   32.8  *   -67.3   *  74.9  *
*  4030.0  *    6.7    *  294.0   *  4025.7  *   33.3  *   -68.4   *  76.0  *
*  4040.0  *    6.7    *  294.0   *  4035.6  *   33.8  *   -69.4   *  77.2  *
*  4050.0  *    6.7    *  293.0   *  4045.5  *   34.2  *   -70.5   *  78.4  *
*  4060.0  *    6.6    *  294.0   *  4055.5  *   34.7  *   -71.5   *  79.5  *
*  4070.0  *    6.6    *  294.0   *  4065.4  *   35.1  *   -72.6   *  80.7  *
*  4080.0  *    6.5    *  293.0   *  4075.3  *   35.6  *   -73.6   *  81.8  *
*  4090.0  *    6.5    *  293.0   *  4085.3  *   36.0  *   -74.7   *  82.9  *
*  4100.0  *    6.4    *  294.0   *  4095.2  *   36.5  *   -75.7   *  84.0  *
*  4110.0  *    6.4    *  293.0   *  4105.1  *   36.9  *   -76.7   *  85.1  *
*  4120.0  *    6.3    *  294.0   *  4115.1  *   37.4  *   -77.7   *  86.2  *
*  4130.0  *    6.3    *  294.0   *  4125.0  *   37.8  *   -78.7   *  87.3  *
*  4140.0  *    6.3    *  292.0   *  4135.0  *   38.2  *   -79.7   *  88.4  *
*  4150.0  *    6.3    *  291.0   *  4144.9  *   38.6  *   -80.8   *  89.5  *
*  4160.0  *    6.2    *  292.0   *  4154.8  *   39.0  *   -81.8   *  90.6  *
*  4170.0  *    6.2    *  291.0   *  4164.8  *   39.4  *   -82.8   *  91.7  *
*  4180.0  *    6.2    *  290.0   *  4174.7  *   39.8  *   -83.8   *  92.8  *
*  4190.0  *    6.2    *  291.0   *  4184.7  *   40.2  *   -84.8   *  93.8  *
*  4200.0  *    6.2    *  288.0   *  4194.6  *   40.5  *   -85.8   *  94.9  *
*  4210.0  *    6.2    *  289.0   *  4204.5  *   40.8  *   -86.8   *  96.0  *
*  4220.0  *    6.1    *  290.0   *  4214.5  *   41.2  *   -87.8   *  97.0  *
*  4230.0  *    6.1    *  289.0   *  4224.4  *   41.6  *   -88.9   *  98.1  *
*  4240.0  *    6.1    *  290.0   *  4234.4  *   41.9  *   -89.9   *  99.1  *
*  4250.0  *    6.1    *  290.0   *  4244.3  *   42.3  *   -90.8   * 100.2  *
*  4260.0  *    6.1    *  291.0   *  4254.3  *   42.7  *   -91.8   * 101.3  *
*****************************************************************************
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REF   4107.                                                          PAGE   3
*****************************************************************************
*          *           *          * TRUE     *    CO-ORDINATES      *        *
*  DEPTH   * DEVIATION * AZIMUTH  * VERTICAL *********************** COURSE *
*  FEET    *  DEGREES  * DEGREES  * DEPTH    * + NORTH * + EAST    * LENGTH *
*          *           *          * FEET     * - SOUTH * - WEST    * FEET   *
*****************************************************************************
*  4270.0  *    6.1    *  292.0   *  4264.2  *   43.1  *   -92.8   * 102.3  *
*  4280.0  *    6.0    *  289.0   *  4274.2  *   43.4  *   -93.8   * 103.4  *
*  4290.0  *    6.0    *  291.0   *  4284.1  *   43.8  *   -94.8   * 104.4  *
*  4300.0  *    6.0    *  289.0   *  4294.0  *   44.1  *   -95.8   * 105.5  *
*  4310.0  *    6.0    *  289.0   *  4304.0  *   44.5  *   -96.8   * 106.5  *
*  4320.0  *    6.1    *  288.0   *  4313.9  *   44.8  *   -97.8   * 107.5  *
*  4330.0  *    6.0    *  285.0   *  4323.9  *   45.1  *   -98.8   * 108.6  *
*  4340.0  *    6.0    *  285.0   *  4333.8  *   45.3  *   -99.8   * 109.6  *
*  4350.0  *    6.0    *  284.0   *  4343.8  *   45.6  *  -100.8   * 110.6  *
*  4360.0  *    6.0    *  283.0   *  4353.7  *   45.8  *  -101.8   * 111.7  *
*  4370.0  *    6.0    *  282.0   *  4363.7  *   46.0  *  -102.9   * 112.7  *
*  4380.0  *    5.9    *  284.0   *  4373.6  *   46.3  *  -103.9   * 113.7  *
*  4390.0  *    6.0    *  285.0   *  4383.6  *   46.6  *  -104.9   * 114.7  *
*  4400.0  *    6.0    *  284.0   *  4393.5  *   46.8  *  -105.9   * 115.8  *
*  4410.0  *    6.0    *  283.0   *  4403.4  *   47.0  *  -106.9   * 116.8  *
*  4420.0  *    6.0    *  283.0   *  4413.4  *   47.3  *  -107.9   * 117.8  *
*  4430.0  *    6.0    *  282.0   *  4423.3  *   47.5  *  -108.9   * 118.8  *
*  4440.0  *    6.0    *  282.0   *  4433.3  *   47.7  *  -110.0   * 119.9  *
*  4450.0  *    6.0    *  281.0   *  4443.2  *   47.9  *  -111.0   * 120.9  *
*  4460.0  *    6.0    *  282.0   *  4453.2  *   48.1  *  -112.0   * 121.9  *
*  4470.0  *    6.0    *  277.0   *  4463.1  *   48.3  *  -113.0   * 122.9  *
*  4480.0  *    6.0    *  278.0   *  4473.1  *   48.4  *  -114.1   * 123.9  *
*  4490.0  *    6.0    *  278.0   *  4483.0  *   48.5  *  -115.1   * 124.9  *
*  4500.0  *    6.0    *  278.0   *  4492.9  *   48.7  *  -116.1   * 125.9  *
*  4510.0  *    6.0    *  278.0   *  4502.9  *   48.8  *  -117.2   * 127.0  *
*  4520.0  *    6.0    *  278.0   *  4512.8  *   49.0  *  -118.2   * 128.0  *
*  4530.0  *    6.0    *  278.0   *  4522.8  *   49.1  *  -119.3   * 129.0  *
*  4540.0  *    6.0    *  280.0   *  4532.7  *   49.3  *  -120.3   * 130.0  *
*  4550.0  *    6.0    *  279.0   *  4542.7  *   49.5  *  -121.3   * 131.0  *
*  4560.0  *    6.0    *  280.0   *  4552.6  *   49.7  *  -122.3   * 132.0  *
*  4570.0  *    6.0    *  281.0   *  4562.6  *   49.9  *  -123.4   * 133.1  *
*  4580.0  *    6.0    *  279.0   *  4572.5  *   50.0  *  -124.4   * 134.1  *
*  4590.0  *    6.0    *  279.0   *  4582.5  *   50.2  *  -125.4   * 135.1  *
*  4600.0  *    6.0    *  278.0   *  4592.4  *   50.3  *  -126.5   * 136.1  *
*  4610.0  *    6.0    *  279.0   *  4602.3  *   50.5  *  -127.5   * 137.1  *
*  4620.0  *    6.0    *  277.0   *  4612.3  *   50.6  *  -128.5   * 138.1  *
*  4630.0  *    6.0    *  278.0   *  4622.2  *   50.8  *  -129.6   * 139.2  *
*  4640.0  *    6.0    *  279.0   *  4632.2  *   50.9  *  -130.6   * 140.2  *
*  4650.0  *    6.0    *  278.0   *  4642.1  *   51.1  *  -131.6   * 141.2  *
*  4660.0  *    6.0    *  279.0   *  4652.1  *   51.2  *  -132.7   * 142.2  *
*  4670.0  *    6.0    *  278.0   *  4662.0  *   51.4  *  -133.7   * 143.2  *
*  4680.0  *    6.0    *  281.0   *  4672.0  *   51.6  *  -134.7   * 144.3  *
*  4690.0  *    6.0    *  279.0   *  4681.9  *   51.7  *  -135.8   * 145.3  *
*  4700.0  *    6.0    *  280.0   *  4691.9  *   51.9  *  -136.8   * 146.3  *
*  4710.0  *    6.0    *  281.0   *  4701.8  *   52.1  *  -137.8   * 147.4  *
*  4720.0  *    6.0    *  279.0   *  4711.7  *   52.3  *  -138.9   * 148.4  *
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REF   4107.                                                          PAGE   4
*****************************************************************************
*          *           *          * TRUE     *    CO-ORDINATES      *        *
*  DEPTH   * DEVIATION * AZIMUTH  * VERTICAL *********************** COURSE *
*  FEET    *  DEGREES  * DEGREES  * DEPTH    * + NORTH * + EAST    * LENGTH *
*          *           *          * FEET     * - SOUTH * - WEST    * FEET   *
*****************************************************************************
*  4730.0  *    6.0    *  280.0   *  4721.7  *   52.5  *  -139.9   * 149.4  *
*  4740.0  *    6.0    *  280.0   *  4731.6  *   52.7  *  -140.9   * 150.4  *
*  4750.0  *    6.0    *  278.0   *  4741.6  *   52.8  *  -142.0   * 151.5  *
*  4760.0  *    5.8    *  283.0   *  4751.5  *   53.0  *  -142.9   * 152.5  *
*  4770.0  *    5.8    *  283.0   *  4761.5  *   53.3  *  -143.9   * 153.5  *
*  4780.0  *    5.8    *  281.0   *  4771.4  *   53.4  *  -144.9   * 154.5  *
*  4790.0  *    5.7    *  282.0   *  4781.4  *   53.6  *  -145.9   * 155.4  *
*  4800.0  *    5.7    *  277.0   *  4791.3  *   53.8  *  -146.9   * 156.4  *
*  4810.0  *    5.8    *  274.0   *  4801.3  *   53.8  *  -147.9   * 157.4  *
*  4820.0  *    5.9    *  273.0   *  4811.2  *   53.9  *  -148.9   * 158.4  *
*  4830.0  *    5.8    *  272.0   *  4821.2  *   53.9  *  -149.9   * 159.3  *
*  4840.0  *    5.8    *  272.0   *  4831.1  *   54.0  *  -150.9   * 160.3  *
*  4850.0  *    5.8    *  274.0   *  4841.1  *   54.0  *  -151.9   * 161.3  *
*  4860.0  *    5.9    *  273.0   *  4851.0  *   54.1  *  -153.0   * 162.2  *
*  4870.0  *    5.9    *  274.0   *  4861.0  *   54.2  *  -154.0   * 163.2  *
*  4880.0  *    5.9    *  274.0   *  4870.9  *   54.2  *  -155.0   * 164.2  *
*  4890.0  *    5.9    *  274.0   *  4880.9  *   54.3  *  -156.0   * 165.2  *
*  4900.0  *    5.8    *  274.0   *  4890.8  *   54.4  *  -157.0   * 166.2  *
*  4910.0  *    5.8    *  272.0   *  4900.8  *   54.4  *  -158.1   * 167.2  *
*  4920.0  *    5.8    *  272.0   *  4910.7  *   54.4  *  -159.1   * 168.1  *
*  4930.0  *    5.8    *  272.0   *  4920.7  *   54.5  *  -160.1   * 169.1  *
*  4940.0  *    5.9    *  273.0   *  4930.6  *   54.6  *  -161.1   * 170.1  *
*  4950.0  *    5.9    *  273.0   *  4940.5  *   54.6  *  -162.1   * 171.1  *
*  4960.0  *    5.9    *  272.0   *  4950.5  *   54.6  *  -163.2   * 172.1  *
*  4970.0  *    5.9    *  272.0   *  4960.4  *   54.7  *  -164.2   * 173.0  *
*  4980.0  *    5.9    *  271.0   *  4970.4  *   54.7  *  -165.2   * 174.0  *
*  4990.0  *    5.9    *  269.0   *  4980.3  *   54.7  *  -166.2   * 175.0  *
*  5000.0  *    5.9    *  270.0   *  4990.3  *   54.7  *  -167.3   * 176.0  *
*  5010.0  *    5.9    *  269.0   *  5000.2  *   54.7  *  -168.3   * 176.9  *
*  5020.0  *    5.9    *  269.0   *  5010.2  *   54.6  *  -169.3   * 177.9  *
*  5030.0  *    6.0    *  268.0   *  5020.1  *   54.6  *  -170.4   * 178.9  *
*  5040.0  *    6.0    *  269.0   *  5030.1  *   54.6  *  -171.4   * 179.9  *
*  5050.0  *    6.0    *  270.0   *  5040.0  *   54.6  *  -172.5   * 180.9  *
*  5060.0  *    6.0    *  271.0   *  5050.0  *   54.6  *  -173.5   * 181.9  *
*  5070.0  *    6.0    *  271.0   *  5059.9  *   54.6  *  -174.5   * 182.9  *
*  5080.0  *    6.1    *  271.0   *  5069.8  *   54.6  *  -175.6   * 183.9  *
*  5090.0  *    6.1    *  272.0   *  5079.8  *   54.7  *  -176.7   * 184.9  *
*  5100.0  *    6.0    *  273.0   *  5089.7  *   54.7  *  -177.7   * 186.0  *
*  5110.0  *    6.0    *  274.0   *  5099.7  *   54.8  *  -178.8   * 187.0  *
*  5120.0  *    6.0    *  272.0   *  5109.6  *   54.8  *  -179.8   * 188.0  *
*  5130.0  *    6.0    *  274.0   *  5119.6  *   54.9  *  -180.8   * 189.0  *
*  5140.0  *    6.0    *  274.0   *  5129.5  *   55.0  *  -181.9   * 190.0  *
*  5150.0  *    6.0    *  272.0   *  5139.5  *   55.0  *  -182.9   * 191.0  *
*  5160.0  *    6.1    *  274.0   *  5149.4  *   55.1  *  -184.0   * 192.1  *
*  5170.0  *    6.0    *  271.0   *  5159.3  *   55.1  *  -185.0   * 193.1  *
*  5180.0  *    6.0    *  272.0   *  5169.3  *   55.2  *  -186.1   * 194.1  *
*****************************************************************************
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REF   4107.                                                          PAGE   5
*****************************************************************************
*          *           *          * TRUE     *    CO-ORDINATES      *        *
*  DEPTH   * DEVIATION * AZIMUTH  * VERTICAL *********************** COURSE *
*  FEET    *  DEGREES  * DEGREES  * DEPTH    * + NORTH * + EAST    * LENGTH *
*          *           *          * FEET     * - SOUTH * - WEST    * FEET   *
*****************************************************************************
*  5190.0  *    6.0    *  271.0   *  5179.2  *   55.2  *  -187.1   * 195.1  *
*  5200.0  *    6.0    *  270.0   *  5189.2  *   55.2  *  -188.2   * 196.1  *
*  5210.0  *    6.0    *  272.0   *  5199.1  *   55.2  *  -189.2   * 197.1  *
*  5220.0  *    6.0    *  270.0   *  5209.1  *   55.2  *  -190.3   * 198.1  *
*  5230.0  *    6.0    *  271.0   *  5219.0  *   55.2  *  -191.3   * 199.1  *
*  5240.0  *    6.0    *  270.0   *  5229.0  *   55.2  *  -192.3   * 200.1  *
*  5250.0  *    6.0    *  270.0   *  5238.9  *   55.2  *  -193.4   * 201.1  *
*  5260.0  *    6.0    *  268.0   *  5248.9  *   55.2  *  -194.4   * 202.1  *
*  5270.0  *    6.0    *  273.0   *  5258.8  *   55.2  *  -195.5   * 203.1  *
*  5280.0  *    6.0    *  269.0   *  5268.7  *   55.2  *  -196.5   * 204.1  *
*  5290.0  *    6.0    *  271.0   *  5278.7  *   55.2  *  -197.6   * 205.2  *
*  5300.0  *    6.0    *  270.0   *  5288.6  *   55.2  *  -198.6   * 206.2  *
*  5310.0  *    6.0    *  270.0   *  5298.6  *   55.2  *  -199.7   * 207.2  *
*  5320.0  *    6.0    *  267.0   *  5308.5  *   55.2  *  -200.7   * 208.2  *
*  5330.0  *    6.0    *  271.0   *  5318.5  *   55.2  *  -201.8   * 209.2  *
*  5340.0  *    6.0    *  268.0   *  5328.4  *   55.2  *  -202.8   * 210.2  *
*  5350.0  *    6.0    *  269.0   *  5338.4  *   55.2  *  -203.8   * 211.2  *
*  5360.0  *    6.0    *  267.0   *  5348.3  *   55.1  *  -204.9   * 212.2  *
*  5370.0  *    6.0    *  267.0   *  5358.2  *   55.0  *  -205.9   * 213.2  *
*  5380.0  *    6.0    *  269.0   *  5368.2  *   55.0  *  -207.0   * 214.2  *
*  5390.0  *    6.0    *  265.0   *  5378.1  *   54.9  *  -208.0   * 215.1  *
*  5400.0  *    5.9    *  267.0   *  5388.1  *   54.9  *  -209.0   * 216.1  *
*  5410.0  *    6.0    *  266.0   *  5398.0  *   54.8  *  -210.1   * 217.1  *
*  5420.0  *    6.0    *  265.0   *  5408.0  *   54.7  *  -211.1   * 218.1  *
*  5430.0  *    6.0    *  267.0   *  5417.9  *   54.7  *  -212.2   * 219.1  *
*  5440.0  *    6.0    *  265.0   *  5427.9  *   54.6  *  -213.2   * 220.1  *
*  5450.0  *    6.0    *  265.0   *  5437.8  *   54.5  *  -214.3   * 221.1  *
*  5460.0  *    6.0    *  356.6   *  5447.8  *   54.4  *  -215.3   * 222.1  *
*  5470.0  *    6.0    *  354.9   *  5457.7  *   54.3  *  -216.3   * 223.1  *
*  5480.0  *    6.0    *  353.3   *  5467.6  *   54.2  *  -217.4   * 224.0  *
*  5490.0  *    6.0    *  351.6   *  5477.6  *   54.1  *  -218.4   * 225.0  *
*  5500.0  *    6.0    *  349.9   *  5487.5  *   54.0  *  -219.5   * 226.0  *
*  5510.0  *    6.0    *  348.2   *  5497.5  *   53.9  *  -220.5   * 227.0  *
*  5520.0  *    6.0    *  346.5   *  5507.4  *   53.9  *  -221.5   * 228.0  *
*  5530.0  *    6.0    *  344.8   *  5517.4  *   53.8  *  -222.6   * 229.0  *
*  5540.0  *    6.0    *  343.2   *  5527.3  *   53.7  *  -223.6   * 230.0  *
*  5550.0  *    6.0    *  341.5   *  5537.3  *   53.6  *  -224.7   * 231.0  *
*  5560.0  *    6.0    *  339.8   *  5547.2  *   53.5  *  -225.7   * 232.0  *
*  5570.0  *    6.0    *  338.1   *  5557.2  *   53.4  *  -226.8   * 233.0  *
*  5580.0  *    6.0    *  336.4   *  5567.1  *   53.3  *  -227.8   * 233.9  *
*  5590.0  *    6.0    *  334.7   *  5577.0  *   53.2  *  -228.8   * 234.9  *
*  5600.0  *    6.0    *  333.0   *  5587.0  *   53.1  *  -229.9   * 235.9  *
*  5610.0  *    6.0    *  331.4   *  5596.9  *   53.0  *  -230.9   * 236.9  *
*  5620.0  *    6.0    *  329.7   *  5606.9  *   52.9  *  -232.0   * 237.9  *
*  5630.0  *    6.0    *  328.0   *  5616.8  *   52.9  *  -233.0   * 238.9  *
*  5640.0  *    6.0    *  326.3   *  5626.8  *   52.8  *  -234.0   * 239.9  *
*****************************************************************************
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REF   4107.                                                          PAGE   6
*****************************************************************************
*          *           *          * TRUE     *    CO-ORDINATES      *        *
*  DEPTH   * DEVIATION * AZIMUTH  * VERTICAL *********************** COURSE *
*  FEET    *  DEGREES  * DEGREES  * DEPTH    * + NORTH * + EAST    * LENGTH *
*          *           *          * FEET     * - SOUTH * - WEST    * FEET   *
*****************************************************************************
*  5650.0  *    6.0    *  324.6   *  5636.7  *   52.7  *  -235.1   * 240.9  *
*  5660.0  *    6.0    *  322.9   *  5646.7  *   52.6  *  -236.1   * 241.9  *
*  5670.0  *    6.0    *  321.3   *  5656.6  *   52.5  *  -237.2   * 242.9  *
*  5680.0  *    6.0    *  319.6   *  5666.6  *   52.4  *  -238.2   * 243.9  *
*  5690.0  *    6.0    *  317.9   *  5676.5  *   52.3  *  -239.2   * 244.9  *
*  5700.0  *    6.0    *  316.2   *  5686.4  *   52.2  *  -240.3   * 245.9  *
*  5710.0  *    6.0    *  314.5   *  5696.4  *   52.1  *  -241.3   * 246.9  *
*  5720.0  *    6.0    *  312.8   *  5706.3  *   52.0  *  -242.4   * 247.9  *
*  5730.0  *    6.0    *  311.2   *  5716.3  *   51.9  *  -243.4   * 248.9  *
*  5740.0  *    6.0    *  309.5   *  5726.2  *   51.9  *  -244.5   * 249.9  *
*  5750.0  *    6.0    *  307.8   *  5736.2  *   51.8  *  -245.5   * 250.9  *
*  5760.0  *    6.0    *  306.1   *  5746.1  *   51.7  *  -246.5   * 251.9  *
*  5770.0  *    6.0    *  304.4   *  5756.1  *   51.6  *  -247.6   * 252.9  *
*  5780.0  *    6.0    *  302.7   *  5766.0  *   51.5  *  -248.6   * 253.9  *
*  5790.0  *    6.0    *  301.0   *  5776.0  *   51.4  *  -249.7   * 254.9  *
*  5800.0  *    6.0    *  299.4   *  5785.9  *   51.3  *  -250.7   * 255.9  *
*  5810.0  *    6.0    *  297.7   *  5795.8  *   51.2  *  -251.7   * 256.9  *
*  5820.0  *    6.0    *  296.0   *  5805.8  *   51.1  *  -252.8   * 257.9  *
*  5830.0  *    6.0    *  294.3   *  5815.7  *   51.0  *  -253.8   * 258.9  *
*  5840.0  *    6.0    *  292.6   *  5825.7  *   50.9  *  -254.9   * 259.9  *
*  5850.0  *    6.0    *  290.9   *  5835.6  *   50.9  *  -255.9   * 260.9  *
*  5860.0  *    6.0    *  289.3   *  5845.6  *   50.8  *  -256.9   * 261.9  *
*  5870.0  *    6.0    *  287.6   *  5855.5  *   50.7  *  -258.0   * 262.9  *
*  5880.0  *    6.0    *  285.9   *  5865.5  *   50.6  *  -259.0   * 263.9  *
*  5890.0  *    6.0    *  284.2   *  5875.4  *   50.5  *  -260.1   * 264.9  *
*  5900.0  *    6.0    *  282.5   *  5885.3  *   50.4  *  -261.1   * 265.9  *
*  5910.0  *    6.0    *  280.8   *  5895.3  *   50.3  *  -262.2   * 266.9  *
*  5920.0  *    6.0    *  279.1   *  5905.2  *   50.2  *  -263.2   * 267.9  *
*  5930.0  *    6.0    *  277.5   *  5915.2  *   50.1  *  -264.2   * 269.0  *
*  5940.0  *    6.0    *  275.8   *  5925.1  *   50.0  *  -265.3   * 270.0  *
*  5950.0  *    6.0    *  274.1   *  5935.1  *   49.9  *  -266.3   * 271.0  *
*  5960.0  *    6.0    *  272.4   *  5945.0  *   49.9  *  -267.4   * 272.0  *
*  5970.0  *    6.0    *  270.7   *  5955.0  *   49.8  *  -268.4   * 273.0  *
*  5980.0  *    6.0    *  269.0   *  5964.9  *   49.7  *  -269.4   * 274.0  *
*  5990.0  *    6.0    *  267.4   *  5974.9  *   49.6  *  -270.5   * 275.0  *
*  6000.0  *    6.0    *  265.7   *  5984.8  *   49.5  *  -271.5   * 276.0  *
*  6004.0  *    6.0    *  265.0   *  5988.8  *   49.4  *  -271.9   * 276.4  *
*****************************************************************************
```

```
REF   4107.                                                          PAGE   7
*****************************************************************************
*                           BOTTOM HOLE LOCATION                            *
*                                                                           *
*                           COURSE LENGTH:          276.4  FEET             *
*                                                                           *
*                           COURSE AZIMUTH:         280.3  DEGREES          *
*                                                                           *
*                                                                           *
*                           MEASURED DEPTH:        6004.0  FEET             *
*                                                                           *
*                           TRUE VERTICAL DEPTH:   5988.8  FEET             *
*                                                                           *
*                           DISTANCE NORTH:          49.4  FEET             *
*                                                                           *
*                           DISTANCE WEST:          271.9  FEET             *
*                                                                           *
*                                                                           *
*                           TANGENTIAL METHOD                               *
*                                                                           *
*****************************************************************************
```

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**********************************
*                                *
*                                *
*                                *
**********************************
*--------------------------------*
*---------SCHLUMBERGER-----------*
*--------------------------------*
**********************************


            DIPMETER

            CLUSTER

            CALCULATION

            LISTING

UNION OIL OF CAL

CFS 42-7

WILDCAT

BEAVER, UTAH

RUN NO. ONE          JOB NO.  4107

CORRELATION LENGTH         4 FT.

STEP LENGTH                2 FT.

SEARCH ANGLE           50 DEG. X1

            13-MAR-78
```

```
**********************************
*                                *
*                                *
*                                *
**********************************
*--------------------------------*
*---------SCHLUMBERGER-----------*
*--------------------------------*
**********************************


            DIPMETER

            CLUSTER

            CALCULATION

            LISTING

UNION OIL OF CAL

CFS 42-7

WILDCAT

BEAVER, UTAH

RUN NO. ONE          JOB NO.  4107

CORRELATION LENGTH         4 FT.

STEP LENGTH                2 FT.

SEARCH ANGLE           50 DEG. X1

            13-MAR-78
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   1 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  3380.0                       6.0    303      11.8      11.3           *
*  3382.0                       6.0    303      11.7      11.4           *
*  3384.0                       6.0    301      11.7      11.4           *
*  3386.0                       6.0    303      11.8      11.8           *
*  3388.0    40.7     285       6.0    304      12.2      12.3      1    *
*  3390.0    41.0     282       6.0    304      12.4      12.4      3    *
*  3392.0                       6.0    305      12.1      12.3           *
*  3394.0                       6.0    301      11.9      12.2           *
*  3396.0                       6.0    303      11.9      12.1           *
*  3398.0    46.6     274       6.0    305      12.0      12.0      1    *
*  3400.0    34.2     292       6.0    303      11.7      11.8      1    *
*  3402.0    26.4     294       6.0    303      11.3      11.7      1    *
*  3404.0                       6.0    305      11.2      11.7           *
*  3406.0     4.6     206       6.0    306      11.1      11.7      1    *
*  3408.0     7.5     154       6.0    306      11.2      11.4      1    *
*  3410.0     9.4     116       6.0    305      11.2      11.1      1    *
*  3412.0     5.4     214       6.0    304      11.4      11.1      1    *
*  3414.0     5.0     225       6.0    305      11.5      11.1      3    *
*  3416.0    21.0     296       6.0    304      11.8      11.2      1    *
*  3418.0                       6.0    301      12.2      11.2           *
*  3420.0                       6.0    300      12.1      11.3           *
*  3422.0    13.8     297       6.0    300      11.9      11.5      3    *
*  3424.0                       6.0    302      11.5      11.3           *
*  3426.0    12.1      87       6.0    304      11.2      11.2      3    *
*  3428.0    13.5     101       6.0    303      11.2      11.4      3    *
*  3430.0     5.3     315       6.0    302      11.2      11.4      3    *
*  3432.0     6.6     328       6.0    302      11.2      11.2      3    *
*  3434.0    44.7     269       6.0    302      11.3      11.1      3    *
*  3436.0    44.4     269       6.1    300      11.2      11.2      1    *
*  3438.0    10.8     341       6.1    300      11.0      11.3      3    *
*  3440.0    11.4     342       6.1    303      10.6      11.0      3    *
*  3442.0    13.2     301       6.1    303      10.2      10.9      1    *
*  3444.0     4.7       5       6.1    303      10.4      11.0      1    *
*  3446.0                       6.1    303      10.4      10.9           *
*  3448.0    43.8     109       6.1    304      10.9      11.2      1    *
*  3450.0                       6.1    303      11.5      11.6           *
*  3452.0    45.0     103       6.1    301      10.6      10.8      3    *
*  3454.0    56.7      99       6.1    300       9.5       9.9      1    *
*  3456.0                       6.1    302       9.6       9.8           *
*  3458.0                       6.1    305       9.8       9.8           *
*  3460.0                       6.1    304       9.8       9.8           *
*  3462.0                       6.1    304       9.9      10.0           *
*  3464.0                       6.2    304       9.7      10.0           *
*  3466.0     6.8     309       6.2    304       9.6       9.8      4    *
*  3468.0     9.6     340       6.2    304       9.7       9.9      4    *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   2 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  3470.0     9.4     337       6.2    305       9.8      10.1      4    *
*  3472.0    11.7     314       6.2    306       9.8      10.0      4    *
*  3474.0                       6.2    304       9.8      10.0           *
*  3476.0                       6.2    302       9.8      10.1           *
*  3478.0                       6.2    302       9.9      10.1           *
*  3480.0                       6.2    303      10.4      10.2           *
*  3482.0                       6.2    304      10.9      10.9           *
*  3484.0                       6.2    302      10.7      11.3           *
*  3486.0                       6.2    300      11.0      11.2           *
*  3488.0                       6.2    301      12.3      11.4           *
*  3490.0    39.1     300       6.2    301      12.6      11.9      1    *
*  3492.0                       6.2    300      10.9      11.4           *
*  3494.0    18.4     307       6.3    303      10.2      10.6      1    *
*  3496.0    18.5     308       6.3    301      10.1      10.5      3    *
*  3498.0                       6.3    301       9.9      10.3           *
*  3500.0                       6.3    301       9.7      10.2           *
*  3502.0    20.4     313       6.3    300       9.6      10.2      1    *
*  3504.0    26.2     312       6.3    301       9.6      10.2      3    *
*  3506.0    20.0     330       6.3    302       9.6      10.1      4    *
*  3508.0    18.8     310       6.3    301       9.6      10.1      4    *
*  3510.0    17.9     313       6.3    299       9.6      10.0      4    *
*  3512.0    19.5     306       6.3    299       9.9      10.0      4    *
*  3514.0    20.5     310       6.3    299       9.9      10.2      4    *
*  3516.0    23.9     306       6.3    299       9.6      10.4      4    *
*  3518.0    21.7     311       6.3    299       9.6      10.6      2    *
*  3520.0    31.3     284       6.4    298       9.7      10.6      2    *
*  3522.0    19.4     306       6.4    298       9.8      10.5      4    *
*  3524.0    18.8     305       6.4    297       9.8      10.3      4    *
*  3526.0    17.4     304       6.4    299       9.9      10.3      4    *
*  3528.0    17.8     303       6.4    300       9.9      10.5      4    *
*  3530.0    16.8     298       6.4    299       9.7      10.5      4    *
*  3532.0    16.3     302       6.4    299       9.7      10.4      4    *
*  3534.0                       6.4    299       9.7      10.3           *
*  3536.0                       6.4    300       9.7      10.2           *
*  3538.0                       6.4    301       9.8      10.3           *
*  3540.0                       6.4    300       9.6      10.3           *
*  3542.0                       6.4    299       9.6      10.1           *
*  3544.0                       6.4    301       9.6       9.9           *
*  3546.0    42.6      72       6.4    300       9.6       9.9      3    *
*  3548.0    46.0      66       6.5    299       9.6      10.0      1    *
*  3550.0                       6.5    300       9.6      10.2           *
*  3552.0                       6.5    301       9.5      10.2           *
*  3554.0    31.9     291       6.5    300       9.7      10.2      1    *
*  3556.0                       6.5    298       9.7      10.3           *
*  3558.0                       6.5    297       9.7      10.4           *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   3 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  3560.0    17.5     314       6.5    296       9.7      10.4      3    *
*  3562.0    15.5     311       6.5    298       9.7      10.4      3    *
*  3564.0    14.5     300       6.5    297      10.0      10.4      3    *
*  3566.0    13.8     295       6.5    296      10.2      10.2      1    *
*  3568.0                       6.5    296       9.9      10.1           *
*  3570.0                       6.5    296       9.6      10.1           *
*  3572.0                       6.5    296       9.6      10.0           *
*  3574.0    17.8     330       6.5    296       9.7       9.8      2    *
*  3576.0    15.8     319       6.5    297       9.9       9.8      4    *
*  3578.0    15.5     315       6.5    295       9.8       9.9      4    *
*  3580.0    15.2     310       6.5    295       9.8      10.0      4    *
*  3582.0    14.9     322       6.5    296      10.0      10.1      4    *
*  3584.0                       6.5    297      10.0      10.1           *
*  3586.0    18.4     328       6.5    297       9.8      10.0      4    *
*  3588.0    23.0     328       6.5    296       9.7       9.8      4    *
*  3590.0    13.1     317       6.5    296       9.8       9.9      2    *
*  3592.0     9.0     328       6.5    296       9.9       9.9      4    *
*  3594.0    12.9     328       6.5    296      10.0      10.0      4    *
*  3596.0                       6.5    296       9.8       9.9           *
*  3598.0    20.3     349       6.5    295       9.9       9.8      2    *
*  3600.0    21.2      15       6.5    294       9.9       9.8      4    *
*  3602.0                       6.5    294       9.9       9.7           *
*  3604.0    18.1     333       6.5    293       9.8       9.7      4    *
*  3606.0    18.0     333       6.5    293       9.9       9.7      4    *
*  3608.0    12.5     327       6.5    295      10.0       9.8      4    *
*  3610.0    14.3     318       6.5    296      10.0       9.7      4    *
*  3612.0    37.4     322       6.5    296       9.9       9.8      1    *
*  3614.0    30.4     333       6.5    296       9.9       9.7      3    *
*  3616.0    28.7     327       6.5    296      10.0       9.8      1    *
*  3618.0                       6.5    294      10.0       9.8           *
*  3620.0                       6.5    295      10.5      10.0           *
*  3622.0    29.1     333       6.5    295      10.6      10.0      1    *
*  3624.0    33.2     314       6.5    295       9.9       9.8      1    *
*  3626.0                       6.6    296       9.8       9.7           *
*  3628.0                       6.6    295       9.7       9.6           *
*  3630.0                       6.6    295       9.8       9.6           *
*  3632.0    26.1     311       6.6    295      10.0       9.9      3    *
*  3634.0    17.4     323       6.6    296       9.9       9.9      3    *
*  3636.0    15.7     327       6.6    297       9.6       9.5      3    *
*  3638.0    21.5     311       6.6    296       9.5       9.5      3    *
*  3640.0    22.5     306       6.6    293       9.4       9.5      3    *
*  3642.0    16.3     328       6.6    293       9.5       9.5      1    *
*  3644.0     9.7     312       6.6    293       9.6       9.5      1    *
*  3646.0                       6.6    293       9.5       9.5           *
*  3648.0                       6.6    293       9.4       9.5           *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   4 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  3650.0    17.6     327       6.6    294       9.4       9.5      1    *
*  3652.0    15.5     324       6.6    294       9.5       9.5      3    *
*  3654.0    15.4     331       6.6    294       9.6       9.4      1    *
*  3656.0    17.1       6       6.6    294       9.7       9.4      1    *
*  3658.0    26.6     300       6.6    293       9.5       9.4      1    *
*  3660.0                       6.6    294       9.4       9.3           *
*  3662.0                       6.6    295       9.5       9.3           *
*  3664.0    18.6     331       6.6    296       9.7       9.3      3    *
*  3666.0                       6.6    295       9.7       9.6           *
*  3668.0                       6.6    293       9.6       9.7           *
*  3670.0                       6.6    292       9.6       9.5           *
*  3672.0    57.4      56       6.6    293       9.6       9.4      1    *
*  3674.0                       6.6    295       9.6       9.5           *
*  3676.0                       6.6    295       9.6       9.5           *
*  3678.0    68.3      59       6.6    296       9.6       9.6      1    *
*  3680.0    63.0      69       6.6    293       9.7       9.7      1    *
*  3682.0                       6.6    292       9.8       9.8           *
*  3684.0                       6.6    293       9.9       9.8           *
*  3686.0                       6.6    293       9.9       9.8           *
*  3688.0                       6.6    293      10.0       9.9           *
*  3690.0                       6.6    293       9.9       9.9           *
*  3692.0                       6.6    293       9.9      10.0           *
*  3694.0    29.7     314       6.6    291      10.0      10.1      3    *
*  3696.0    29.3     311       6.6    293      10.0      10.0      3    *
*  3698.0                       6.6    294      10.0      10.0           *
*  3700.0                       6.6    294      10.0      10.0           *
*  3702.0    35.3     310       6.6    293       9.9       9.9      1    *
*  3704.0    36.2     310       6.6    293       9.9       9.9      3    *
*  3706.0                       6.6    292      10.0      10.0           *
*  3708.0                       6.6    291      10.0       9.8           *
*  3710.0                       6.6    291       9.8       9.6           *
*  3712.0    26.7     158       6.6    291       9.8       9.6      3    *
*  3714.0    25.2     290       6.6    292       9.8       9.7      1    *
*  3716.0    14.4     216       6.6    291      10.0       9.7      1    *
*  3718.0                       6.6    292      10.2       9.7           *
*  3720.0    22.2     309       6.6    289      10.2       9.8      3    *
*  3722.0                       6.6    286      10.2      10.0           *
*  3724.0     7.3     114       6.6    303       9.4       9.2      3    *
*  3726.0    28.9     307       6.6    305       9.4       9.0      3    *
*  3728.0    27.3     315       6.6    291      10.3       9.6      3    *
*  3730.0                       6.6    291      10.3       9.6           *
*  3732.0                       6.6    292      10.1       9.6           *
*  3734.0                       6.6    291      10.1       9.6           *
*  3736.0    25.0     321       6.6    291      10.2       9.6      1    *
*  3738.0    24.9     323       6.6    292      10.4       9.5      1    *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   5 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  3740.0                       6.6    291      10.4       9.5           *
*  3742.0    27.7     314       6.6    291      10.4       9.5      3    *
*  3744.0    26.2     312       6.6    290      10.5       9.5      3    *
*  3746.0                       6.6    290      10.3       9.5           *
*  3748.0                       6.6    289      10.1       9.5           *
*  3750.0                       6.6    290      10.1       9.5           *
*  3752.0    47.9     142       6.6    290      10.2       9.5      1    *
*  3754.0    40.7     145       6.6    290      10.0       9.5      3    *
*  3756.0    47.9     139       6.6    289       9.9       9.5      1    *
*  3758.0    33.1     319       6.7    290      10.1       9.5      3    *
*  3760.0    31.0     318       6.7    291      10.2       9.5      3    *
*  3762.0    32.8     313       6.7    290      10.4       9.5      3    *
*  3764.0    30.6     326       6.7    290      10.5       9.5      1    *
*  3766.0    30.1     333       6.7    291      10.2       9.5      1    *
*  3768.0    27.0     338       6.7    291      10.1       9.5      1    *
*  3770.0    30.2     320       6.7    290      10.2       9.5      3    *
*  3772.0    25.0     321       6.7    289      10.3       9.5      3    *
*  3774.0    27.5     317       6.7    292      10.3       9.6      3    *
*  3776.0    37.4     308       6.7    292      10.4       9.6      1    *
*  3778.0    27.3     305       6.7    291      10.4       9.6      1    *
*  3780.0                       6.7    291      10.2       9.6           *
*  3782.0                       6.7    291      10.3       9.7           *
*  3784.0                       6.7    292      10.4       9.9           *
*  3786.0    21.4     311       6.7    293      10.5      10.0      1    *
*  3788.0    37.5     318       6.7    292      10.6       9.9      1    *
*  3790.0    23.5     319       6.7    290      10.5       9.8      1    *
*  3792.0    18.8     304       6.7    290      10.3       9.8      1    *
*  3794.0    19.7     298       6.7    291      10.3       9.8      3    *
*  3796.0    18.6     300       6.7    292      10.3       9.7      1    *
*  3798.0                       6.7    291      10.1       9.7           *
*  3800.0                       6.7    290      10.1       9.6           *
*  3802.0                       6.7    290      10.1       9.6           *
*  3804.0    20.9     312       6.7    291      10.2       9.6      3    *
*  3806.0    26.1     320       6.7    292      10.2       9.6      1    *
*  3808.0    23.1     322       6.7    292      10.4       9.6      3    *
*  3810.0    24.7     322       6.7    293      10.6       9.6      1    *
*  3812.0    26.9     326       6.7    292      10.2       9.6      3    *
*  3814.0    27.3     328       6.7    292      10.0       9.6      3    *
*  3816.0                       6.7    292      10.1       9.6           *
*  3818.0                       6.7    293      10.0       9.6           *
*  3820.0                       6.7    292      10.1       9.5           *
*  3822.0                       6.7    293      10.1       9.5           *
*  3824.0    37.9     327       6.7    293      10.0       9.5      1    *
*  3826.0                       6.7    293       9.9       9.4           *
*  3828.0                       6.7    293       9.8       9.4           *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   6 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  3830.0    39.9     319       6.7    292       9.8       9.4      1    *
*  3832.0                       6.7    292       9.7       9.3           *
*  3834.0                       6.7    293       9.8       9.4           *
*  3836.0                       6.7    293       9.9       9.4           *
*  3838.0                       6.7    293      10.0       9.5           *
*  3840.0    26.7     323       6.7    293      10.3       9.6      3    *
*  3842.0    28.7     321       6.7    293      10.3       9.7      3    *
*  3844.0    37.7     310       6.7    292      10.1       9.8      1    *
*  3846.0    39.9     312       6.7    293      10.4       9.9      1    *
*  3848.0                       6.7    293      10.5       9.9           *
*  3850.0    26.2     322       6.7    294      10.3      10.0      3    *
*  3852.0    23.9     314       6.7    294      10.3      10.0      3    *
*  3854.0    26.1     316       6.7    293      10.3      10.1      1    *
*  3856.0    28.4     319       6.7    293      10.4      10.1      3    *
*  3858.0    37.9     325       6.7    293      10.5      10.1      3    *
*  3860.0    24.3     323       6.7    293      10.6      10.1      1    *
*  3862.0    26.2     324       6.7    292      10.5      10.1      3    *
*  3864.0    22.3     319       6.7    293      10.4      10.1      1    *
*  3866.0    25.1     321       6.7    294      10.5      10.1      1    *
*  3868.0    27.3     328       6.7    294      10.3      10.0      1    *
*  3870.0                       6.7    293      10.3      10.0           *
*  3872.0                       6.7    292      10.4      10.0           *
*  3874.0                       6.7    292      10.5      10.0           *
*  3876.0                       6.7    293      10.5      10.0           *
*  3878.0                       6.7    294      10.2       9.9           *
*  3880.0    46.9     346       6.7    295      10.2       9.6      1    *
*  3882.0                       6.7    295      10.0       9.5           *
*  3884.0    42.7     349       6.7    297       9.8       9.5      1    *
*  3886.0    43.2     351       6.7    297       9.8       9.4      1    *
*  3888.0                       6.7    298       9.7       9.4           *
*  3890.0                       6.7    296       9.7       9.3           *
*  3892.0                       6.7    295       9.6       9.2           *
*  3894.0                       6.7    296       9.6       9.2           *
*  3896.0    26.4     291       6.7    295       9.6       9.3      4    *
*  3898.0    17.4     309       6.7    296       9.6       9.4      4    *
*  3900.0    23.5     314       6.7    297       9.6       9.4      4    *
*  3902.0    31.0     292       6.7    297       9.6       9.4      4    *
*  3904.0    27.2     289       6.7    296       9.7       9.4      2    *
*  3906.0    38.0     306       6.7    296       9.7       9.5      2    *
*  3908.0                       6.7    297       9.7       9.4           *
*  3910.0    16.8     309       6.7    296       9.7       9.4      4    *
*  3912.0    19.1     307       6.7    297       9.7       9.4      3    *
*  3914.0                       6.7    297       9.7       9.3           *
*  3916.0                       6.7    299       9.6       9.4           *
*  3918.0    23.7     316       6.7    299       9.6       9.3      3    *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   7 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  3920.0    23.8     316       6.7    297       9.5       9.4      3    *
*  3922.0     7.3      41       6.7    298       9.6       9.4      1    *
*  3924.0                       6.7    299       9.6       9.5           *
*  3926.0    34.8     317       6.7    300       9.7       9.5      1    *
*  3928.0    29.1     324       6.7    299       9.7       9.5      1    *
*  3930.0                       6.7    298       9.7       9.5           *
*  3932.0                       6.7    298       9.8       9.5           *
*  3934.0                       6.7    299       9.9       9.6           *
*  3936.0    69.1     324       6.7    299      10.1       9.7      1    *
*  3938.0                       6.7    297      10.1       9.8           *
*  3940.0                       6.7    298      10.0      10.0           *
*  3942.0    61.1     222       6.7    298      10.2      10.0      1    *
*  3944.0    46.6     276       6.7    298      10.4      10.0      1    *
*  3946.0    46.3     287       6.7    298      10.4      10.0      1    *
*  3948.0                       6.7    298      10.5      10.1           *
*  3950.0    44.6     286       6.7    298      10.4      10.1      1    *
*  3952.0                       6.7    298      10.3      10.1           *
*  3954.0                       6.7    298      10.3      10.0           *
*  3956.0                       6.7    297      10.2      10.0           *
*  3958.0                       6.7    295      10.4      10.0           *
*  3960.0                       6.7    295      10.4      10.0           *
*  3962.0                       6.7    295      10.2      10.0           *
*  3964.0                       6.7    296      10.5       9.8           *
*  3966.0                       6.7    296      10.6       9.7           *
*  3968.0                       6.7    294      10.2       9.6           *
*  3970.0                       6.7    294      10.2       9.6           *
*  3972.0                       6.7    295      10.4       9.5           *
*  3974.0                       6.7    296      10.5       9.6           *
*  3976.0                       6.7    295      10.2       9.5           *
*  3978.0                       6.7    294      10.2       9.5           *
*  3980.0                       6.7    294      10.1       9.5           *
*  3982.0                       6.7    295       9.9       9.5           *
*  3984.0                       6.7    295       9.8       9.5           *
*  3986.0                       6.7    295       9.8       9.6           *
*  3988.0                       6.7    294       9.9       9.6           *
*  3990.0                       6.7    294      10.0       9.6           *
*  3992.0    13.8     336       6.7    294       9.9       9.7      1    *
*  3994.0     9.7     322       6.7    293       9.8       9.7      1    *
*  3996.0                       6.7    294       9.9       9.7           *
*  3998.0    44.4     315       6.7    294      10.0       9.8      3    *
*  4000.0    45.3     316       6.7    293      10.1       9.9      1    *
*  4002.0    13.2       4       6.7    293      10.1       9.9      3    *
*  4004.0    13.8       8       6.7    293      10.1       9.9      3    *
*  4006.0                       6.7    293      10.0       9.9           *
*  4008.0                       6.7    293      10.0       9.9           *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   8 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  4010.0    13.1     343       6.7    294      10.2       9.9      1    *
*  4012.0    15.4     181       6.7    292      10.0       9.9      3    *
*  4014.0    18.5     189       6.7    294       9.8       9.9      1    *
*  4016.0                       6.7    294       9.9       9.9           *
*  4018.0                       6.7    292      10.0       9.9           *
*  4020.0    19.5     325       6.7    292      10.0       9.9      1    *
*  4022.0    11.8     324       6.7    292       9.9       9.9      3    *
*  4024.0    21.1     163       6.7    293       9.8       9.9      1    *
*  4026.0                       6.7    293       9.9       9.9           *
*  4028.0                       6.7    293       9.9       9.9           *
*  4030.0    16.3     318       6.7    294       9.9       9.9      1    *
*  4032.0                       6.7    295      10.0       9.9           *
*  4034.0    23.0     314       6.7    295       9.9       9.9      1    *
*  4036.0                       6.7    294       9.9       9.9           *
*  4038.0                       6.7    293      10.0      10.0           *
*  4040.0                       6.7    294      10.0      10.0           *
*  4042.0    34.0     344       6.7    295      10.0      10.1      1    *
*  4044.0    39.3     349       6.7    294      10.0      10.1      1    *
*  4046.0                       6.7    293       9.9      10.1           *
*  4048.0    37.7       1       6.7    294      10.0      10.1      3    *
*  4050.0    15.3     338       6.7    294      10.0      10.2      1    *
*  4052.0                       6.7    292      10.0      10.4           *
*  4054.0                       6.7    293      10.2      10.4           *
*  4056.0                       6.7    294      10.3      10.4           *
*  4058.0    50.4     299       6.7    293      10.2      10.5      1    *
*  4060.0                       6.6    292      10.0      10.5           *
*  4062.0                       6.6    295      10.0      10.6           *
*  4064.0    46.5     295       6.6    296      10.0      10.6      1    *
*  4066.0                       6.6    292       9.9      10.6           *
*  4068.0                       6.6    293      10.1      10.5           *
*  4070.0                       6.6    296      10.0      10.4           *
*  4072.0                       6.6    294      10.2      10.3           *
*  4074.0                       6.6    294      10.3      10.2           *
*  4076.0                       6.6    296      10.2      10.0           *
*  4078.0                       6.5    295      10.4       9.8           *
*  4080.0                       6.5    291      10.4       9.7           *
*  4082.0                       6.5    292      10.2       9.7           *
*  4084.0                       6.5    295      10.2       9.7           *
*  4086.0                       6.5    293      10.2       9.6           *
*  4088.0                       6.5    292      10.4       9.6           *
*  4090.0                       6.5    292      10.2       9.8           *
*  4092.0    56.4     337       6.5    294      10.1       9.9      1    *
*  4094.0                       6.5    292      10.1       9.9           *
*  4096.0                       6.4    295      10.0      10.0           *
*  4098.0                       6.4    296      10.0      10.1           *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE   9 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  4100.0                       6.4    293      10.1      10.2           *
*  4102.0                       6.4    293      10.1      10.4           *
*  4104.0                       6.4    294      10.2      10.4           *
*  4106.0                       6.4    293      10.1      10.3           *
*  4108.0                       6.4    292       9.9      10.3           *
*  4110.0    56.1     341       6.4    294      10.2      10.2      1    *
*  4112.0                       6.4    294      10.1      10.1           *
*  4114.0    18.2     198       6.3    292       9.9      10.2      1    *
*  4116.0    60.0     176       6.3    292      10.0      10.1      3    *
*  4118.0    59.6     175       6.3    294      10.2      10.0      1    *
*  4120.0                       6.3    294      10.2       9.9           *
*  4122.0                       6.3    294      10.0       9.9           *
*  4124.0                       6.3    294      10.0       9.9           *
*  4126.0    18.8     176       6.3    294      10.1       9.9      1    *
*  4128.0                       6.3    294      10.0       9.8           *
*  4130.0                       6.3    295      10.0       9.8           *
*  4132.0                       6.3    295      10.0       9.7           *
*  4134.0                       6.3    292      10.0       9.7           *
*  4136.0                       6.3    291      10.1       9.9           *
*  4138.0    15.9     347       6.3    293      10.1       9.9      1    *
*  4140.0                       6.3    292      10.1       9.8           *
*  4142.0                       6.3    290      10.1       9.7           *
*  4144.0    18.1     335       6.3    292      10.0       9.7      1    *
*  4146.0    18.0     334       6.3    291       9.9       9.6      3    *
*  4148.0    18.2     337       6.3    290       9.8       9.6      1    *
*  4150.0    27.4     329       6.3    292       9.8       9.6      1    *
*  4152.0    30.3     335       6.2    293       9.7       9.5      3    *
*  4154.0    34.3     334       6.2    291       9.7       9.5      1    *
*  4156.0    32.8     339       6.2    291       9.7       9.5      3    *
*  4158.0    31.0     339       6.2    292       9.7       9.5      1    *
*  4160.0    32.7     326       6.2    291       9.8       9.5      3    *
*  4162.0    28.2     342       6.2    291      10.0       9.6      1    *
*  4164.0    36.0     330       6.2    293      10.1       9.7      1    *
*  4166.0                       6.2    292      10.3       9.8           *
*  4168.0                       6.2    290      10.2       9.9           *
*  4170.0    28.6     344       6.2    291      10.2       9.9      1    *
*  4172.0    28.6     321       6.2    293      10.2      10.1      1    *
*  4174.0    32.7     319       6.2    290      10.3      10.3      1    *
*  4176.0    27.6     324       6.2    290      10.4      10.4      1    *
*  4178.0                       6.2    291      10.5      10.5           *
*  4180.0    32.2     318       6.2    291      11.0      10.7      1    *
*  4182.0    20.1     303       6.2    289      10.9      10.8      1    *
*  4184.0                       6.2    290      10.6      10.6           *
*  4186.0                       6.2    290      10.6      10.5           *
*  4188.0                       6.2    291      10.7      10.5           *
**************************************************************************
```

```
UNION OIL OF CAL         CFS 42-7                           PAGE  10 FILE  1
**************************************************************************
*        *    FORMATION    *               BOREHOLE              * QUAL. *
*        *-----------------*-------------------------------------* INDEX *
*  DEPTH *    DIP     DIP  *    DEV.   DEV.      DIAM      DIAM  * BEST  *
*        *            AZI. *           AZI.      1-3       2-4   *  =4   *
**************************************************************************
*  4190.0                       6.2    292      10.6      10.5           *
*  4192.0                       6.2    291      10.6      10.5           *
*  4194.0                       6.2    288      10.9      10.5           *
*  4196.0                       6.2    287      11.7      10.4           *
*  4198.0                       6.2    287      12.2      10.4           *
*  4200.0                       6.2    288      11.4      10.3           *
*  4202.0                       6.2    289      10.9      10.2           *
*  4204.0                       6.2    289      10.5      10.1           *
*  4206.0                       6.2    289      10.0       9.8           *
*  4208.0                       6.2    289       9.9       9.7           *
*  4210.0                       6.2    290       9.8       9.6           *
*  4212.0                       6.1    289       9.8       9.6           *
*  4214.0    30.3     318       6.1    288       9.9       9.7      1    *
*  4216.0    13.4     323       6.1    288      10.0       9.8      1    *
*  4218.0    20.3     318       6.1    289       9.9       9.8      1    *
*  4220.0    20.5     318       6.1    289       9.8       9.7      1    *
*  4222.0                       6.1    291       9.8       9.6           *
*  4224.0                       6.1    290       9.8       9.6           *
*  4226.0                       6.1    289       9.8       9.6           *
*  4228.0                       6.1    289       9.9       9.6           *
*  4230.0    20.9     303       6.1    289      10.1       9.6      1    *
*  4232.0                       6.1    289      10.0       9.6           *
*  4234.0    47.1      56       6.1    290       9.9       9.6      1    *
*  4236.0                       6.1    290       9.8       9.7           *
*  4238.0                       6.1    289       9.8       9.7           *
*  4240.0                       6.1    290       9.8       9.7           *
*  4242.0    43.5      57       6.1    291       9.7       9.7      1    *
*  4244.0    43.6      57       6.1    290       9.7       9.6      1    *
*  4246.0    24.3     340       6.1    290       9.7       9.6      1    *
*  4248.0    30.8      30       6.1    291       9.7       9.6      1    *
*  4250.0                       6.1    290       9.8       9.6           *
*  4252.0                       6.1    290       9.7       9.6           *
*  4254.0    23.3     341       6.1    291       9.7       9.6      3    *
*  4256.0    23.3     341       6.1    291       9.7       9.6      3    *
*  4258.0    20.6     344       6.1    290       9.8       9.6      1    *
*  4260.0                       6.1    291       9.8       9.6           *
*  4262.0                       6.1    292       9.9       9.6           *
*  4264.0                       6.1    290       9.9       9.6           *
*  4266.0    21.6     346       6.1    292       9.8       9.5      1    *
*  4268.0    24.8     313       6.1    292       9.7       9.5      1    *
*  4270.0    25.1     311       6.1    291       9.6       9.5      1    *
*  4272.0    21.5     354       6.0    292       9.6       9.4      4    *
*  4274.0    21.9     355       6.0    292       9.6       9.5      4    *
*  4276.0     9.9       5       6.0    289       9.7       9.5      2    *
*  4278.0    12.5       3       6.0    289       9.8       9.5      2    *
**************************************************************************
```

```
UNION OIL OF CAL          CFS 42-7                 PAGE  11 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4280.0  24.6    21     6.0   291    9.8    9.5    2  *
* 4282.0  35.4   344     6.0   289    9.9    9.5    2  *
* 4284.0                 6.0   287   10.1    9.6       *
* 4286.0  23.7   350     6.0   290   10.2    9.6    4  *
* 4288.0  26.3   351     6.0   292   10.0    9.5    4  *
* 4290.0  31.1   350     6.0   290    9.8    9.5    2  *
* 4292.0  17.0   350     6.0   290    9.6    9.3    4  *
* 4294.0  17.4   353     6.0   290    9.5    9.2    4  *
* 4296.0  20.3   354     6.0   288    9.5    9.3    4  *
* 4298.0  20.7   357     6.0   290    9.4    9.3    4  *
* 4300.0                 6.0   291    9.4    9.3       *
* 4302.0  30.0    88     6.1   288    9.4    9.2    3  *
* 4304.0  30.0    88     6.1   287    9.4    9.2    3  *
* 4306.0                 6.1   289    9.4    9.2       *
* 4308.0                 6.0   290    9.5    9.2       *
* 4310.0                 6.0   289    9.5    9.2       *
* 4312.0                 6.0   289    9.4    9.2       *
* 4314.0                 6.0   288    9.4    9.2       *
* 4316.0                 6.0   288    9.4    9.2       *
* 4318.0                 6.0   289    9.4    9.2       *
* 4320.0                 6.1   289    9.4    9.2       *
* 4322.0  20.8   342     6.1   286    9.4    9.2    3  *
* 4324.0  25.4   338     6.1   285    9.5    9.3    3  *
* 4326.0  26.1   337     6.0   286    9.5    9.3    3  *
* 4328.0  18.1   336     6.0   286    9.5    9.2    1  *
* 4330.0                 6.0   285    9.5    9.2       *
* 4332.0                 6.0   285    9.4    9.2       *
* 4334.0                 6.0   284    9.4    9.2       *
* 4336.0  34.0   319     6.0   283    9.4    9.2    1  *
* 4338.0  33.7   321     6.0   285    9.5    9.2    1  *
* 4340.0  27.1   317     6.0   285    9.6    9.2    1  *
* 4342.0                 6.0   285    9.4    9.2       *
* 4344.0  15.5   322     6.0   285    9.4    9.2    1  *
* 4346.0  23.3   340     6.0   282    9.4    9.2    1  *
* 4348.0  18.9   348     6.0   283    9.4    9.2    3  *
* 4350.0  19.8   348     6.0   286    9.5    9.3    1  *
* 4352.0  23.6   345     6.0   284    9.5    9.3    1  *
* 4354.0  24.9   345     6.0   283    9.5    9.3    1  *
* 4356.0                 6.0   283    9.5    9.4       *
* 4358.0                 6.0   282    9.5    9.4       *
* 4360.0                 6.0   282    9.5    9.4       *
* 4362.0  45.3   313     6.0   284    9.6    9.4    1  *
* 4364.0  46.1   305     6.0   284    9.6    9.4    1  *
* 4366.0  24.7   293     6.0   283    9.6    9.4    1  *
* 4368.0  43.5   286     6.0   283    9.7    9.4    1  *
**************************************************************
```

```
UNION OIL OF CAL          CFS 42-7                 PAGE  12 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4370.0  47.4   285     6.0   283    9.8    9.4    1  *
* 4372.0  36.7   292     6.0   281    9.7    9.4    3  *
* 4374.0  42.6   290     6.0   283    9.8    9.4    1  *
* 4376.0                 6.0   284    9.8    9.4       *
* 4378.0                 5.9   283    9.8    9.4       *
* 4380.0                 5.9   284    9.8    9.4       *
* 4382.0                 6.0   285    9.8    9.4       *
* 4384.0  50.3   330     6.0   285    9.8    9.3    1  *
* 4386.0  37.1   267     6.0   285    9.7    9.3    3  *
* 4388.0  50.4   332     6.0   285    9.7    9.2    1  *
* 4390.0                 6.0   284    9.7    9.2       *
* 4392.0                 6.0   284    9.7    9.3       *
* 4394.0                 6.0   286    9.7    9.3       *
* 4396.0  68.6    15     6.0   285    9.8    9.3    1  *
* 4398.0                 6.0   284    9.8    9.4       *
* 4400.0                 6.0   284    9.8    9.4       *
* 4402.0                 6.0   283    9.9    9.4       *
* 4404.0                 6.0   284    9.9    9.3       *
* 4406.0                 6.0   285   10.0    9.3       *
* 4408.0                 6.0   284   10.0    9.4       *
* 4410.0                 6.0   282   10.1    9.3       *
* 4412.0                 6.0   283   10.1    9.4       *
* 4414.0                 6.0   282   10.1    9.3       *
* 4416.0                 6.0   282   10.0    9.3       *
* 4418.0  24.2   345     6.0   283    9.9    9.3    3  *
* 4420.0  21.5   342     6.0   283    9.8    9.3    1  *
* 4422.0                 6.0   282    9.7    9.3       *
* 4424.0                 6.0   282    9.8    9.3       *
* 4426.0                 6.0   282    9.7    9.3       *
* 4428.0                 6.0   282    9.7    9.3       *
* 4430.0                 6.0   282    9.7    9.4       *
* 4432.0                 6.0   283    9.7    9.4       *
* 4434.0                 6.0   282    9.8    9.4       *
* 4436.0                 6.0   282    9.8    9.4       *
* 4438.0                 6.0   282    9.8    9.4       *
* 4440.0                 6.0   281    9.8    9.4       *
* 4442.0                 6.0   281    9.8    9.5       *
* 4444.0  46.6   345     6.0   283    9.8    9.5    1  *
* 4446.0  46.5   344     6.0   283    9.8    9.5    1  *
* 4448.0                 6.0   281    9.8    9.5       *
* 4450.0                 6.0   281    9.8    9.5       *
* 4452.0                 6.0   281    9.8    9.5       *
* 4454.0                 6.0   281    9.9    9.5       *
* 4456.0                 6.0   282    9.9    9.5       *
* 4458.0                 6.0   282    9.8    9.5       *
**************************************************************
```

```
UNION OIL OF CAL          CFS 42-7                 PAGE  13 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4460.0                 6.0   281    9.8    9.5       *
* 4462.0                 6.0   281    9.8    9.5       *
* 4464.0  57.7   231     6.0   282    9.8    9.5    1  *
* 4466.0  47.2   243     6.0   276    9.7    9.6    1  *
* 4468.0                 6.0   276    9.7    9.6       *
* 4470.0                 6.0   278    9.8    9.7       *
* 4472.0  54.6   242     6.0   279    9.8    9.7    1  *
* 4474.0  51.6   235     6.0   278    9.8    9.7    1  *
* 4476.0                 6.0   278    9.9    9.7       *
* 4478.0                 6.0   278    9.9    9.8       *
* 4480.0                 6.0   278    9.8    9.8       *
* 4482.0  67.5   307     6.0   278    9.8    9.7    1  *
* 4484.0                 6.0   279    9.8    9.7       *
* 4486.0                 6.0   278    9.8    9.7       *
* 4488.0                 6.0   278    9.7    9.6       *
* 4490.0                 6.0   278    9.7    9.6       *
* 4492.0  45.8   343     6.0   278    9.7    9.5    1  *
* 4494.0  44.9   112     6.0   278    9.7    9.5    1  *
* 4496.0  44.5   112     6.0   278    9.7    9.5    1  *
* 4498.0                 6.0   277    9.7    9.5       *
* 4500.0                 6.0   277    9.7    9.5       *
* 4502.0                 6.0   279    9.7    9.5       *
* 4504.0  64.8   255     6.0   278    9.8    9.5    1  *
* 4506.0  64.9   254     6.0   276    9.7    9.5    1  *
* 4508.0                 6.0   278    9.8    9.5       *
* 4510.0                 6.0   280    9.8    9.6       *
* 4512.0   6.7    39     6.0   278    9.8    9.6    1  *
* 4514.0   7.5    45     6.0   277    9.8    9.6    1  *
* 4516.0  18.3   357     6.0   278    9.8    9.6    1  *
* 4518.0  20.1    11     6.0   278    9.8    9.6    3  *
* 4520.0  20.0    11     6.0   278    9.8    9.6    3  *
* 4522.0  31.8   264     6.0   278    9.8    9.6    1  *
* 4524.0  31.7   265     6.0   279    9.8    9.6    1  *
* 4526.0  25.5     1     6.0   278    9.8    9.6    3  *
* 4528.0  27.6   358     6.0   278    9.8    9.6    1  *
* 4530.0  44.0   321     6.0   278    9.8    9.6    1  *
* 4532.0                 6.0   280    9.8    9.6       *
* 4534.0  22.4    15     6.0   281    9.8    9.6    1  *
* 4536.0  30.5   322     6.0   281    9.8    9.6    1  *
* 4538.0  30.5   321     6.0   280    9.8    9.6    1  *
* 4540.0                 6.0   280    9.8    9.6       *
* 4542.0                 6.0   280    9.8    9.6       *
* 4544.0  43.5   353     6.0   279    9.8    9.6    1  *
* 4546.0                 6.0   279    9.8    9.6       *
* 4548.0                 6.0   280    9.8    9.6       *
**************************************************************
```

```
UNION OIL OF CAL          CFS 42-7                 PAGE  14 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4550.0  24.1     5     6.0   279    9.8    9.6    1  *
* 4552.0  29.5     2     6.0   279    9.8    9.6    3  *
* 4554.0  24.5   344     6.0   281    9.8    9.6    1  *
* 4556.0  24.6   342     6.0   281    9.8    9.5    1  *
* 4558.0  26.4     6     6.0   280    9.7    9.5    1  *
* 4560.0  25.4   359     6.0   280    9.7    9.5    3  *
* 4562.0  31.5   356     6.0   280    9.7    9.5    4  *
* 4564.0  31.9   354     6.0   280    9.7    9.5    4  *
* 4566.0  35.7   354     6.0   279    9.7    9.5    4  *
* 4568.0  31.9   355     6.0   281    9.7    9.4    4  *
* 4570.0  30.3   360     6.0   281    9.7    9.4    4  *
* 4572.0  39.4   359     6.0   281    9.7    9.4    3  *
* 4574.0  38.5   358     6.0   281    9.7    9.4    3  *
* 4576.0  38.7   360     6.0   281    9.7    9.4    3  *
* 4578.0                 6.0   280    9.7    9.4       *
* 4580.0                 6.0   279    9.7    9.4       *
* 4582.0  46.2    10     6.0   278    9.7    9.5    1  *
* 4584.0                 6.0   278    9.8    9.5       *
* 4586.0                 6.0   279    9.8    9.5       *
* 4588.0  39.9   273     6.0   280    9.7    9.5    1  *
* 4590.0  10.8   290     6.0   278    9.7    9.5    1  *
* 4592.0  10.7   294     6.0   279    9.8    9.5    3  *
* 4594.0   4.0   224     6.0   280    9.8    9.5    1  *
* 4596.0  36.2    99     6.0   278    9.8    9.5    1  *
* 4598.0  35.7    98     6.0   278    9.8    9.5    1  *
* 4600.0  45.7   218     6.0   279    9.9    9.5    1  *
* 4602.0                 6.0   278    9.8    9.5       *
* 4604.0  54.1   124     6.0   278    9.7    9.5    1  *
* 4606.0                 6.0   279    9.7    9.5       *
* 4608.0                 6.0   280    9.7    9.4       *
* 4610.0                 6.0   279    9.7    9.4       *
* 4612.0  55.2     6     6.0   279    9.7    9.5    3  *
* 4614.0  55.0     7     6.0   279    9.7    9.5    1  *
* 4616.0                 6.0   277    9.7    9.5       *
* 4618.0                 6.0   277    9.7    9.5       *
* 4620.0                 6.0   277    9.7    9.5       *
* 4622.0                 6.0   277    9.7    9.4       *
* 4624.0                 6.0   279    9.7    9.4       *
* 4626.0                 6.0   279    9.8    9.5       *
* 4628.0  55.1   297     6.0   278    9.8    9.5    1  *
* 4630.0                 6.0   278    9.8    9.5       *
* 4632.0  49.9   293     6.0   279    9.8    9.4    1  *
* 4634.0  47.0   299     6.0   277    9.8    9.4    1  *
* 4636.0  44.9   298     6.0   278    9.7    9.4    1  *
* 4638.0  65.7    62     6.0   280    9.7    9.3    1  *
**************************************************************
```

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UNION OIL OF CAL          CFS 42-7                 PAGE  15 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4640.0                 6.0   279    9.7    9.2       *
* 4642.0                 6.0   279    9.7    9.2       *
* 4644.0                 6.0   280    9.6    9.2       *
* 4646.0  16.8   301     6.0   280    9.7    9.3    1  *
* 4648.0                 6.0   279    9.7    9.3       *
* 4650.0                 6.0   278    9.7    9.3       *
* 4652.0                 6.0   278    9.7    9.3       *
* 4654.0  20.0   319     6.0   278    9.7    9.3    3  *
* 4656.0  26.7   315     6.0   278    9.7    9.2    1  *
* 4658.0                 6.0   278    9.8    9.3       *
* 4660.0                 6.0   279    9.7    9.3       *
* 4662.0                 6.0   279    9.7    9.3       *
* 4664.0  14.2   323     6.0   280    9.7    9.3    3  *
* 4666.0   9.6   322     6.0   280    9.7    9.3    3  *
* 4668.0                 6.0   278    9.7    9.2       *
* 4670.0                 6.0   278    9.7    9.2       *
* 4672.0   7.6   301     6.0   278    9.7    9.2    1  *
* 4674.0   7.6   299     6.0   278    9.6    9.2    1  *
* 4676.0                 6.0   280    9.6    9.2       *
* 4678.0                 6.0   281    9.6    9.2       *
* 4680.0                 6.0   280    9.6    9.2       *
* 4682.0                 6.0   280    9.6    9.2       *
* 4684.0                 6.0   281    9.6    9.2       *
* 4686.0                 6.0   279    9.6    9.2       *
* 4688.0                 6.0   278    9.7    9.2       *
* 4690.0                 6.0   280    9.7    9.2       *
* 4692.0                 6.0   280    9.6    9.1       *
* 4694.0                 6.0   279    9.6    9.1       *
* 4696.0                 6.0   281    9.5    9.1       *
* 4698.0                 6.0   281    9.5    9.1       *
* 4700.0                 6.0   279    9.5    9.1       *
* 4702.0                 6.0   279    9.5    9.1       *
* 4704.0                 6.0   281    9.5    9.1       *
* 4706.0                 6.0   280    9.6    9.1       *
* 4708.0                 6.0   281    9.6    9.1       *
* 4710.0                 6.0   281    9.6    9.1       *
* 4712.0                 6.0   281    9.6    9.2       *
* 4714.0  30.7   354     6.0   281    9.6    9.2    1  *
* 4716.0  30.6   353     6.0   280    9.6    9.2    1  *
* 4718.0  21.1   351     6.0   278    9.7    9.2    1  *
* 4720.0                 6.0   279    9.7    9.2       *
* 4722.0                 6.0   279    9.6    9.2       *
* 4724.0  12.0    17     6.0   279    9.6    9.2    1  *
* 4726.0                 6.0   279    9.6    9.2       *
* 4728.0                 6.0   279    9.6    9.2       *
**************************************************************
```

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UNION OIL OF CAL          CFS 42-7                 PAGE  16 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4730.0                 6.0   279    9.6    9.2       *
* 4732.0                 6.0   280    9.6    9.3       *
* 4734.0                 5.9   280    9.7    9.3       *
* 4736.0                 5.9   280    9.7    9.3       *
* 4738.0                 6.0   281    9.7    9.2       *
* 4740.0                 6.0   279    9.7    9.2       *
* 4742.0                 6.0   278    9.6    9.2       *
* 4744.0                 6.0   279    9.5    9.1       *
* 4746.0                 6.0   277    9.5    9.1       *
* 4748.0                 6.0   277    9.7    9.1       *
* 4750.0                 6.0   279    9.8    9.2       *
* 4752.0                 6.0   280    9.5    9.2       *
* 4754.0                 6.0   280    9.3    9.2       *
* 4756.0                 5.9   282    9.3    9.1       *
* 4758.0                 5.8   281    9.3    9.1       *
* 4760.0                 5.8   281    9.4    9.1       *
* 4762.0                 5.8   284    9.4    9.1       *
* 4764.0                 5.8   285    9.5    9.2       *
* 4766.0                 5.8   286    9.7    9.2       *
* 4768.0                 5.8   284    9.6    9.2       *
* 4770.0                 5.8   282    9.5    9.2       *
* 4772.0                 5.8   281    9.4    9.2       *
* 4774.0                 5.8   279    9.4    9.2       *
* 4776.0                 5.8   280    9.4    9.1       *
* 4778.0                 5.8   282    9.4    9.1       *
* 4780.0  10.6   354     5.8   281    9.4    9.2    3  *
* 4782.0  12.5   349     5.8   280    9.6    9.2    3  *
* 4784.0                 5.7   282    9.6    9.2       *
* 4786.0  13.9   343     5.7   282    9.6    9.2    4  *
* 4788.0  13.5   344     5.7   283    9.6    9.2    4  *
* 4790.0  11.8   346     5.7   286    9.7    9.2    4  *
* 4792.0   9.5   346     5.7   281    9.7    9.3    4  *
* 4794.0  14.4   340     5.7   276    9.6    9.4    3  *
* 4796.0  20.4   282     5.7   277    9.7    9.4    1  *
* 4798.0  20.4   288     5.7   280    9.7    9.4    1  *
* 4800.0  19.2   348     5.7   278    9.7    9.4    3  *
* 4802.0  19.5   345     5.7   275    9.6    9.4    3  *
* 4804.0                 5.7   275    9.7    9.4       *
* 4806.0                 5.7   274    9.7    9.4       *
* 4808.0                 5.8   274    9.7    9.4       *
* 4810.0                 5.8   274    9.6    9.5       *
* 4812.0  24.7   238     5.8   274    9.6    9.5    1  *
* 4814.0  24.1   238     5.8   274    9.6    9.5    1  *
* 4816.0                 5.8   274    9.4    9.5       *
* 4818.0                 5.8   274    9.5    9.5       *
**************************************************************
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```
UNION OIL OF CAL          CFS 42-7                 PAGE  17 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4820.0  32.2    93     5.9   273    9.6    9.5    1  *
* 4822.0  33.6    89     5.9   272    9.6    9.6    1  *
* 4824.0                 5.8   271    9.7    9.6       *
* 4826.0                 5.8   271    9.7    9.6       *
* 4828.0                 5.9   272    9.7    9.6       *
* 4830.0                 5.8   272    9.6    9.5       *
* 4832.0                 5.8   272    9.5    9.5       *
* 4834.0                 5.9   272    9.6    9.5       *
* 4836.0                 5.9   272    9.6    9.5       *
* 4838.0                 5.8   272    9.6    9.5       *
* 4840.0                 5.8   272    9.6    9.5       *
* 4842.0                 5.8   273    9.6    9.5       *
* 4844.0                 5.8   274    9.6    9.5       *
* 4846.0  24.3   355     5.8   274    9.6    9.5    3  *
* 4848.0                 5.8   273    9.5    9.5       *
* 4850.0                 5.8   274    9.5    9.5       *
* 4852.0                 5.9   274    9.6    9.5       *
* 4854.0                 5.9   274    9.6    9.5       *
* 4856.0  40.5   360     5.9   273    9.6    9.5    3  *
* 4858.0  40.2   359     5.9   274    9.5    9.5    1  *
* 4860.0  41.0   358     5.9   273    9.5    9.4    1  *
* 4862.0  39.1   356     5.9   272    9.5    9.4    3  *
* 4864.0  43.2   360     5.9   273    9.7    9.3    3  *
* 4866.0  43.5   359     5.9   273    9.7    9.3    3  *
* 4868.0  33.1   353     5.9   273    9.6    9.3    3  *
* 4870.0                 5.9   273    9.6    9.4       *
* 4872.0  25.0   342     5.9   275    9.7    9.5    1  *
* 4874.0  42.4    13     5.9   275    9.7    9.5    1  *
* 4876.0  46.7   342     5.9   273    9.6    9.5    1  *
* 4878.0                 5.8   273    9.5    9.5       *
* 4880.0  48.4   345     5.9   274    9.6    9.5    1  *
* 4882.0  35.6   338     5.9   275    9.7    9.5    1  *
* 4884.0                 5.9   273    9.8    9.5       *
* 4886.0                 5.9   273    9.7    9.5       *
* 4888.0  37.7   347     5.9   274    9.6    9.5    1  *
* 4890.0                 5.9   274    9.6    9.4       *
* 4892.0                 5.9   273    9.6    9.4       *
* 4894.0  43.4    21     5.9   274    9.6    9.4    1  *
* 4896.0                 5.8   274    9.6    9.4       *
* 4898.0                 5.8   273    9.6    9.4       *
* 4900.0  27.4     2     5.8   273    9.8    9.3    1  *
* 4902.0  39.1   360     5.8   275    9.8    9.3    3  *
* 4904.0                 5.8   275    9.5    9.2       *
* 4906.0                 5.8   273    9.4    9.2       *
* 4908.0                 5.8   272    9.5    9.2       *
**************************************************************
```

```
UNION OIL OF CAL          CFS 42-7                 PAGE  18 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4910.0                 5.8   272    9.5    9.3       *
* 4912.0                 5.8   272    9.5    9.3       *
* 4914.0  31.4   343     5.9   273    9.6    9.3    1  *
* 4916.0  32.8   342     5.9   273    9.5    9.4    1  *
* 4918.0  31.6   342     5.8   273    9.5    9.3    1  *
* 4920.0                 5.8   272    9.6    9.3       *
* 4922.0                 5.8   272    9.6    9.3       *
* 4924.0  53.5    42     5.8   273    9.5    9.3    1  *
* 4926.0                 5.8   273    9.6    9.2       *
* 4928.0  44.9    34     5.9   273    9.7    9.2    1  *
* 4930.0                 5.9   273    9.6    9.2       *
* 4932.0                 5.8   273    9.6    9.2       *
* 4934.0                 5.8   273    9.6    9.2       *
* 4936.0  44.6    43     5.8   273    9.6    9.2    1  *
* 4938.0  44.5    42     5.8   273    9.6    9.2    1  *
* 4940.0  57.6   341     5.8   273    9.6    9.2    1  *
* 4942.0                 5.9   273    9.6    9.2       *
* 4944.0                 5.9   272    9.5    9.3       *
* 4946.0                 5.8   272    9.6    9.3       *
* 4948.0                 5.8   274    9.7    9.3       *
* 4950.0                 5.9   273    9.7    9.3       *
* 4952.0                 5.9   272    9.6    9.3       *
* 4954.0                 5.8   273    9.7    9.3       *
* 4956.0                 5.9   273    9.8    9.2       *
* 4958.0                 5.9   273    9.7    9.2       *
* 4960.0                 5.9   273    9.6    9.2       *
* 4962.0                 5.9   272    9.6    9.2       *
* 4964.0  16.0   243     5.9   271    9.6    9.2    1  *
* 4966.0                 5.9   272    9.6    9.2       *
* 4968.0                 5.9   272    9.6    9.2       *
* 4970.0  14.9   239     5.9   271    9.6    9.2    3  *
* 4972.0  15.8   237     5.9   272    9.6    9.2    1  *
* 4974.0                 5.9   271    9.5    9.3       *
* 4976.0                 5.9   272    9.6    9.3       *
* 4978.0                 5.9   272    9.6    9.3       *
* 4980.0   7.0    66     5.8   270    9.6    9.3    1  *
* 4982.0   6.0    54     5.9   269    9.7    9.3    3  *
* 4984.0                 5.9   269    9.7    9.2       *
* 4986.0                 5.9   269    9.6    9.2       *
* 4988.0                 5.9   269    9.6    9.3       *
* 4990.0                 5.9   270    9.6    9.3       *
* 4992.0                 5.9   270    9.7    9.4       *
* 4994.0  40.7   328     6.0   270    9.7    9.3    1  *
* 4996.0  39.0   328     5.9   271    9.6    9.4    1  *
* 4998.0                 5.9   270    9.6    9.3       *
**************************************************************
```

```
UNION OIL OF CAL          CFS 42-7                 PAGE  19 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 5000.0                 5.9   269    9.7    9.3       *
* 5002.0                 6.0   270    9.6    9.3       *
* 5004.0                 5.9   269    9.5    9.3       *
* 5006.0                 5.9   268    9.6    9.2       *
* 5008.0                 5.9   270    9.6    9.2       *
* 5010.0                 5.9   269    9.6    9.3       *
* 5012.0                 5.9   268    9.6    9.2       *
* 5014.0  14.7   353     5.9   269    9.6    9.2    1  *
* 5016.0  13.3     6     5.9   269    9.6    9.3    3  *
* 5018.0  15.2     7     5.9   270    9.6    9.3    3  *
* 5020.0  13.8    16     5.9   269    9.6    9.3    1  *
* 5022.0                 5.9   269    9.6    9.2       *
* 5024.0                 5.9   269    9.6    9.2       *
* 5026.0                 6.0   269    9.6    9.2       *
* 5028.0                 6.0   268    9.6    9.2       *
* 5030.0                 6.0   269    9.5    9.2       *
* 5032.0                 6.0   268    9.4    9.2       *
* 5034.0                 6.0   268    9.4    9.2       *
* 5036.0                 6.0   268    9.4    9.2       *
* 5038.0                 6.0   269    9.3    9.2       *
* 5040.0                 6.0   269    9.4    9.2       *
* 5042.0                 6.0   269    9.5    9.2       *
* 5044.0                 6.0   269    9.5    9.2       *
* 5046.0  43.7   300     6.0   270    9.5    9.3    1  *
* 5048.0                 6.0   270    9.5    9.3       *
* 5050.0  31.7   336     6.0   269    9.6    9.3    1  *
* 5052.0  30.2   335     6.0   269    9.5    9.3    1  *
* 5054.0                 6.0   270    9.6    9.3       *
* 5056.0  44.1   297     6.0   270    9.6    9.3    3  *
* 5058.0  45.5   298     6.0   271    9.7    9.2    3  *
* 5060.0                 6.0   270    9.6    9.3       *
* 5062.0  33.2     3     6.0   271    9.6    9.2    3  *
* 5064.0                 6.0   272    9.8    9.2       *
* 5066.0                 6.0   271    9.8    9.3       *
* 5068.0                 6.0   270    9.7    9.3       *
* 5070.0                 6.0   271    9.6    9.4       *
* 5072.0                 6.0   271    9.6    9.3       *
* 5074.0                 6.1   271    9.6    9.3       *
* 5076.0                 6.1   271    9.5    9.3       *
* 5078.0                 6.0   271    9.5    9.3       *
* 5080.0                 6.1   271    9.6    9.4       *
* 5082.0                 6.1   271    9.7    9.4       *
* 5084.0                 6.1   270   10.0    9.5       *
* 5086.0                 6.1   270    9.8    9.4       *
* 5088.0                 6.0   272    9.7    9.3       *
**************************************************************
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UNION OIL OF CAL          CFS 42-7                 PAGE  20 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 5090.0                 6.1   273    9.7    9.2       *
* 5092.0                 6.1   273    9.6    9.3       *
* 5094.0                 6.1   275    9.5    9.3       *
* 5096.0                 6.0   277    9.5    9.3       *
* 5098.0  42.5   165     6.0   275    9.6    9.4    1  *
* 5100.0  42.1   166     6.0   273    9.5    9.4    1  *
* 5102.0  46.9   168     6.0   272    9.6    9.4    1  *
* 5104.0                 6.0   272    9.7    9.4       *
* 5106.0                 6.1   271    9.7    9.4       *
* 5108.0                 6.0   273    9.5    9.4       *
* 5110.0                 6.0   276    9.6    9.4       *
* 5112.0                 6.0   276    9.7    9.4       *
* 5114.0                 6.0   275    9.7    9.4       *
* 5116.0                 6.0   273    9.7    9.4       *
* 5118.0                 6.0   272    9.7    9.4       *
* 5120.0                 6.0   272    9.7    9.4       *
* 5122.0                 6.0   272    9.7    9.4       *
* 5124.0                 6.1   274    9.6    9.5       *
* 5126.0                 6.0   275    9.7    9.5       *
* 5128.0  13.2   352     6.0   275    9.8    9.5    2  *
* 5130.0  13.1   349     6.0   273    9.8    9.5    2  *
* 5132.0                 6.0   272    9.9    9.5       *
* 5134.0  14.4   316     6.0   271    9.8    9.5    2  *
* 5136.0                 6.0   271    9.7    9.5       *
* 5138.0                 6.0   273    9.7    9.5       *
* 5140.0  18.9   343     6.0   274    9.7    9.5    4  *
* 5142.0  18.7   345     6.0   274    9.7    9.5    4  *
* 5144.0  16.7   351     6.0   274    9.7    9.4    3  *
* 5146.0  17.2   353     6.0   274    9.6    9.4    3  *
* 5148.0                 6.0   273    9.6    9.5       *
* 5150.0  20.5   349     6.0   272    9.6    9.5    1  *
* 5152.0  26.6   357     6.0   271    9.6    9.5    1  *
* 5154.0  26.3   356     6.1   271    9.6    9.5    1  *
* 5156.0  25.4   360     6.0   272    9.6    9.4    1  *
* 5158.0                 6.0   274    9.6    9.4       *
* 5160.0                 6.1   275    9.7    9.4       *
* 5162.0  18.2   350     6.1   274    9.7    9.5    1  *
* 5164.0                 6.1   272    9.7    9.4       *
* 5166.0                 6.0   271    9.8    9.4       *
* 5168.0                 6.0   271    9.7    9.4       *
* 5170.0                 6.0   270    9.6    9.4       *
* 5172.0                 6.0   271    9.5    9.5       *
* 5174.0                 6.0   271    9.6    9.5       *
* 5176.0                 6.0   272    9.7    9.5       *
* 5178.0                 6.0   272    9.7    9.5       *
**************************************************************
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UNION OIL OF CAL          CFS 42-7                 PAGE  21 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 5180.0                 6.0   272    9.7    9.5       *
* 5182.0                 6.0   271    9.8    9.5       *
* 5184.0  24.2   350     6.0   269    9.8    9.5    1  *
* 5186.0  26.6    10     6.0   269    9.7    9.5    1  *
* 5188.0                 6.0   270    9.8    9.5       *
* 5190.0                 6.0   271    9.7    9.5       *
* 5192.0  30.0    15     6.0   273    9.7    9.5    3  *
* 5194.0  30.1    15     6.0   272    9.7    9.5    3  *
* 5196.0                 6.0   271    9.7    9.5       *
* 5198.0                 6.0   271    9.6    9.5       *
* 5200.0                 6.0   270    9.6    9.5       *
* 5202.0                 6.0   269    9.7    9.5       *
* 5204.0                 6.0   269    9.6    9.5       *
* 5206.0                 6.0   269    9.7    9.5       *
* 5208.0                 6.0   272    9.6    9.5       *
* 5210.0                 6.0   273    9.6    9.5       *
* 5212.0                 6.0   272    9.6    9.5       *
* 5214.0                 6.0   271    9.7    9.5       *
* 5216.0                 6.0   269    9.8    9.5       *
* 5218.0                 6.0   269    9.6    9.4       *
* 5220.0                 6.0   270    9.6    9.5       *
* 5222.0                 6.0   271    9.7    9.5       *
* 5224.0  22.6    66     6.0   272    9.6    9.4    1  *
* 5226.0                 6.0   273    9.5    9.4       *
* 5228.0  18.3    29     6.0   272    9.6    9.4    1  *
* 5230.0  16.5   343     6.0   271    9.6    9.4    1  *
* 5232.0                 6.0   270    9.6    9.3       *
* 5234.0  40.4    19     6.0   269    9.6    9.3    1  *
* 5236.0  40.9    18     6.0   269    9.6    9.3    1  *
* 5238.0                 6.0   268    9.6    9.4       *
* 5240.0  28.9   345     6.0   270    9.6    9.4    1  *
* 5242.0  15.3   344     6.0   271    9.6    9.4    1  *
* 5244.0  30.2   354     6.0   272    9.5    9.4    2  *
* 5246.0   8.4    10     6.0   271    9.6    9.4    4  *
* 5248.0   8.5     7     6.0   270    9.5    9.3    4  *
* 5250.0  19.9   351     6.0   270    9.5    9.2    4  *
* 5252.0  17.3     4     6.0   269    9.5    9.2    4  *
* 5254.0  15.4    17     6.0   270    9.6    9.2    4  *
* 5256.0  17.4     9     6.0   270    9.6    9.2    4  *
* 5258.0                 6.0   268    9.6    9.2       *
* 5260.0  15.0   335     6.0   268    9.5    9.2    2  *
* 5262.0                 6.0   268    9.4    9.3       *
* 5264.0                 6.0   269    9.6    9.3       *
* 5266.0                 6.0   271    9.7    9.3       *
* 5268.0                 6.0   272    9.6    9.3       *
**************************************************************
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UNION OIL OF CAL          CFS 42-7                 PAGE  22 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 5270.0                 6.0   273    9.6    9.3       *
* 5272.0                 6.0   274    9.6    9.4       *
* 5274.0                 6.0   273    9.6    9.4       *
* 5276.0                 6.0   271    9.7    9.4       *
* 5278.0                 6.0   270    9.8    9.4       *
* 5280.0                 6.0   269    9.8    9.4       *
* 5282.0                 6.0   268    9.8    9.3       *
* 5284.0                 6.0   268    9.7    9.3       *
* 5286.0                 6.0   269    9.6    9.3       *
* 5288.0                 6.0   270    9.7    9.3       *
* 5290.0                 6.0   271    9.8    9.2       *
* 5292.0                 6.0   273    9.8    9.2       *
* 5294.0                 6.0   273    9.7    9.2       *
* 5296.0  43.4   293     6.0   272    9.6    9.2    1  *
* 5298.0                 6.0   271    9.6    9.2       *
* 5300.0  40.1   278     6.0   269    9.6    9.2    3  *
* 5302.0  41.6   276     6.0   268    9.7    9.3    1  *
* 5304.0                 6.0   269    9.8    9.4       *
* 5306.0                 6.0   270    9.7    9.4       *
* 5308.0  24.4    54     6.0   271    9.8    9.4    1  *
* 5310.0  24.1    54     6.0   270    9.8    9.4    1  *
* 5312.0                 6.0   270    9.7    9.4       *
* 5314.0  56.6   213     6.0   269    9.7    9.4    3  *
* 5316.0  56.7   211     6.0   268    9.7    9.4    3  *
* 5318.0  57.3   220     6.0   267    9.8    9.4    1  *
* 5320.0  26.8    72     6.0   267    9.9    9.4    1  *
* 5322.0                 6.0   268    9.9    9.3       *
* 5324.0  50.9   262     6.0   269    9.9    9.3    3  *
* 5326.0  49.3   261     6.0   270    9.7    9.3    1  *
* 5328.0                 6.0   271    9.7    9.3       *
* 5330.0                 6.0   271    9.7    9.3       *
* 5332.0                 6.0   270    9.7    9.3       *
* 5334.0                 6.0   269    9.7    9.4       *
* 5336.0                 6.0   269    9.8    9.4       *
* 5338.0  43.3   253     6.0   268    9.9    9.4    1  *
* 5340.0   5.6    92     6.0   267    9.7    9.4    1  *
* 5342.0                 6.0   267    9.7    9.4       *
* 5344.0                 6.0   268   10.0    9.5       *
* 5346.0                 6.0   269   10.0    9.5       *
* 5348.0                 6.0   270   10.0    9.4       *
* 5350.0                 6.0   270   10.0    9.4       *
* 5352.0                 6.0   269   10.0    9.3       *
* 5354.0                 6.0   269   10.0    9.3       *
* 5356.0                 6.0   269    9.9    9.3       *
* 5358.0                 6.0   268   10.0    9.3       *
**************************************************************
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UNION OIL OF CAL          CFS 42-7                 PAGE  23 FILE  1
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 5360.0  13.4   165     6.0   266   10.0    9.2    3  *
* 5362.0  16.1   147     6.0   265    9.9    9.2    1  *
* 5364.0                 6.0   266    9.9    9.2       *
* 5366.0                 5.9   266    9.9    9.2       *
* 5368.0  57.2    82     5.9   267    9.9    9.2    1  *
* 5370.0  52.5    74     6.0   267    9.9    9.2    1  *
* 5372.0                 6.0   268    9.9    9.2       *
* 5374.0                 6.0   268   10.0    9.2       *
* 5376.0  45.1    82     6.0   269   10.0    9.2    1  *
* 5378.0  45.4    83     6.0   269   10.0    9.2    1  *
* 5380.0                 6.0   269   10.3    9.2       *
* 5382.0                 6.0   268   10.2    9.2       *
* 5384.0                 6.0   267    9.9    9.2       *
* 5386.0                 6.0   267    9.9    9.2       *
* 5388.0                 6.0   266   10.0    9.2       *
* 5390.0                 6.0   265   10.0    9.2       *
* 5392.0                 5.9   265   10.0    9.2       *
* 5394.0                 5.9   266    9.9    9.2       *
* 5396.0                 6.0   267    9.9    9.3       *
* 5398.0                 5.9   267   10.0    9.3       *
* 5400.0                 5.9   267   10.1    9.2       *
* 5402.0                 5.9   268   10.2    9.2       *
* 5404.0                 5.9   268   10.2    9.2       *
* 5406.0                 5.9   268   10.2    9.2       *
* 5408.0                 5.9   267   10.2    9.2       *
* 5410.0                 5.9   266   10.1    9.2       *
* 5412.0  46.2   154     6.0   265   10.0    9.2    3  *
* 5414.0  48.3   152     6.0   264   10.0    9.2    3  *
* 5416.0                 6.0   263   10.0    9.2       *
* 5418.0                 6.0   263   10.0    9.2       *
* 5420.0                 6.0   264   10.0    9.2       *
* 5422.0                 6.0   266    9.8    9.2       *
* 5424.0                 6.0   267    9.7    9.2       *
* 5426.0                 6.0   266   10.0    9.2       *
* 5428.0                 6.0   266   10.0    9.2       *
* 5430.0                 6.0   268   10.3    9.2       *
* 5432.0                 6.0   268   10.4    9.2       *
* 5434.0                 6.0   268   10.2    9.2       *
* 5436.0                 6.0   267   10.0    9.2       *
* 5438.0  12.1   340     6.0   265    9.8    9.2    3  *
* 5440.0  11.5   343     6.0   264    9.8    9.2    3  *
* 5442.0  20.7   313     6.0   265    9.8    9.3    1  *
**************************************************************
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UNION OIL OF CAL          CFS 42-7                 PAGE   1 FILE  2
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4466.0                 6.0   281    9.9    9.5       *
* 4468.0                 6.0   281   10.0    9.5       *
* 4470.0                 6.0   281   10.1    9.5       *
* 4472.0                 6.0   280   10.1    9.6       *
* 4474.0                 6.0   280   10.1    9.6       *
* 4476.0                 6.0   282   10.1    9.6       *
* 4478.0                 6.0   282   10.1    9.6       *
* 4480.0                 6.0   280   10.1    9.5       *
* 4482.0                 6.0   281   10.1    9.5       *
* 4484.0  68.4   188     6.0   281   10.1    9.5    1  *
* 4486.0  68.4   188     6.0   281   10.1    9.5    1  *
* 4488.0  47.0    43     6.0   282   10.0    9.5    3  *
* 4490.0  20.5   333     6.0   282   10.0    9.4    1  *
* 4492.0                 6.0   280    9.9    9.4       *
* 4494.0                 6.0   281    9.8    9.4       *
* 4496.0                 6.0   281    9.8    9.3       *
* 4498.0                 6.0   279    9.8    9.3       *
* 4500.0                 6.0   279    9.9    9.4       *
* 4502.0                 6.0   281   10.0    9.4       *
* 4504.0  47.0   337     6.0   282   10.0    9.5    1  *
* 4506.0  45.5   336     6.0   280   10.0    9.5    1  *
* 4508.0                 6.0   280   10.0    9.5       *
* 4510.0                 6.0   282   10.0    9.5       *
* 4512.0  52.0   275     6.0   281   10.0    9.5    1  *
* 4514.0  46.1   261     6.0   280   10.0    9.5    3  *
* 4516.0  43.8   263     6.0   282   10.1    9.5    1  *
* 4518.0  23.6     9     6.0   281   10.1    9.6    3  *
* 4520.0  21.5    13     6.0   280   10.1    9.6    3  *
* 4522.0                 6.0   281   10.0    9.6       *
* 4524.0  48.7   254     6.0   281   10.0    9.5    1  *
* 4526.0  23.1     1     6.0   280   10.0    9.6    3  *
* 4528.0                 6.0   281   10.0    9.6       *
* 4530.0                 6.0   281   10.0    9.5       *
* 4532.0                 6.0   280   10.0    9.6       *
* 4534.0                 6.0   281   10.0    9.5       *
* 4536.0                 6.0   282   10.0    9.5       *
* 4538.0                 6.0   282    9.9    9.5       *
* 4540.0                 6.0   282    9.9    9.5       *
* 4542.0                 6.0   281    9.9    9.5       *
* 4544.0                 6.0   280    9.8    9.5       *
* 4546.0                 6.0   280    9.8    9.6       *
* 4548.0  11.9    18     6.0   283    9.8    9.5    1  *
* 4550.0                 6.0   283    9.9    9.5       *
* 4552.0  35.1   355     6.0   280    9.8    9.5    4  *
* 4554.0  34.9   350     6.0   280    9.8    9.5    4  *
**************************************************************
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UNION OIL OF CAL          CFS 42-7                 PAGE   2 FILE  2
**************************************************************
*          *   FORMATION     *            BOREHOLE          * QUAL. *
*          *-----------------*------------------------------* INDEX *
*  DEPTH   *   DIP    DIP    *  DEV.   DEV.    DIAM    DIAM * BEST  *
*          *          AZI.   *         AZI.    1-3     2-4  *  =4   *
**************************************************************
* 4556.0  20.0   353     6.0   281    9.8    9.5    4  *
* 4558.0  41.4   354     6.0   281    9.8    9.5    2  *
* 4560.0  31.1   358     6.0   281    9.8    9.5    4  *
* 4562.0  29.2   353     6.0   282    9.8    9.5    4  *
* 4564.0  30.2   352     6.0   281    9.8    9.4    4  *
* 4566.0  37.8   354     6.0   280    9.7    9.4    4  *
* 4568.0  45.9   352     6.0   281    9.6    9.4    3  *
* 4570.0  55.9   350     6.0   280    9.6    9.4    1  *
* 4572.0                 6.0   279    9.6    9.4       *
* 4574.0  55.0   354     6.0   280    9.7    9.3    3  *
* 4576.0  39.5   355     6.0   282    9.7    9.3    1  *
* 4578.0  43.9   337     6.0   282    9.6    9.4    1  *
* 4580.0                 6.0   281    9.6    9.4       *
* 4582.0                 6.0   281    9.7    9.5       *
* 4584.0  49.7   360     6.0   280    9.8    9.5    1  *
* 4586.0                 6.0   280    9.7    9.5       *
**************************************************************
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