### WITS\_WITSML Record 19 Configuration

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| **WITS Record ID:** 19 | **Logical Record Type:** 169 | **Auto/Manual:** Manual |
| **Trigger:** [EVENT] Transmission is operator-initiated | | |
| **Data Source:** Manually entered data, records sent when new data values are available. | | |
| **Data Typology:** Reference (Ref), Date\_Time\_Stamp(Dts), Real-time-Measure (Rtm), Real-time-Signal (Rts), Limit (Lim), Set-Point (Spt), Calculation (Cal), Distribution (Dis), Command (Com), Parameter (Par), Synthetic Value (Syn), Alarm (Alm), Interpreted (Int), Modeled (Mod), Observed (Obs), Code (Cod), Count (Cnt), Cumulative (Cml), Status (Sta), Expected (Exp), Estimated (Est) | | |
| **Data Field Types:** A = Alphanumeric String, L = 32 bit 2's complement signed integer, S = 16 bit 2's complement signed integer, F = 32 bit IEEE single precision floating point, E = Engineering, B = Boolean (1 if True and 0 if False), D = Date, T = Time, V = Variant, IL = Integer List, FL = Float List, EL = Engineering List, TL = Text List | | |
| **Reserved Characters:** Comma (,) - Separates Fields, Semi Colon (;) - Separates Items in a Standard Record, Colon (:) - Separates items in Date and Time Fields, Ampersand (&) - Separates items in a List | | |
| **Data Mnemonic Abbreviations:** Raw (Raw), Average (Avg), Max (Max), Min (Min), Mean (Men), Root-Mean-Square (Rms), Percent (Pct), Error (Err), Correlation (Cor), Probability (Prob), Variance (Var), Spread (Spd), Mean-Absolute-Deviation (Mad), Ratio (Rat), Standard Deviation (Std), Mode (Mod), Weighted Mean (Wtm), Dispersion (Dis), Product (Pro), Sum (Sum), Cumulative Sum (Csm), Corrected (Cor), Adjusted (Adj), Instantaneous (Ins), State (Sta), Observed (Obs), Expected (Exp), Observed-Cumulative (ObC), Expected-Cumulative (ExC), Total (Tot), Reported (Rep), Interpolated (Itp), Period (Per), Currency (Cur) | | |

| WITS  Record / Item | Description | STD WITS Long Mnemonic | Operator Mnemonic for WITSML & OSIsoft PI & ODA | Field Type | Length | Typology | Transmit Units (FPS) | Transmit Units (Metric) | Data System Type |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1901 | Well Identifier | WELLID | WID | A | 16 | Ref | ---- | ---- | Unique Well ID |
| 1902 | Sidetrack/Hole Sect No. | STKNUM | SKNO | S | 2 | Ref | ---- | ---- | Unique Wellbore ID |
| 1903 | Record Identifier | RECID | RID | S | 2 | Ref | ---- | ---- | Identification |
| 1904 | Sequence Identifier | SEQID | SQID | L | 4 | Ref | ---- | ---- | Identification |
| 1905 | Date | DATE | DATE | L | 4 | Dts | ---- | ---- | Date |
| 1906 | Time | TIME | TIME | L | 4 | Dts | ---- | ---- | Time |
| 1907 | Activity Code | ACTCOD | ACTC | S | 2 | Cod | ---- | ---- | Activity |
| 1908 | Depth Hole (meas) | DEPTMEAS | DMEA | F | 4 | Obs | F | M | Depth |
| 1909 | Depth Hole (vert) | DEPTVERT | DVER | F | 4 | Cal | F | M | Depth |
| 1910 | No. Drill String Sections | DSNUM | DSNO | S | 2 | Cnt | ---- | ---- | Count |
| 1911 | DS Section 1 OD | DS1OD | D1OD | F | 4 | Ref | IN | MM | Dimension |
| 1912 | DS Section 1 ID | DS1ID | D1ID | F | 4 | Ref | IN | MM | Dimension |
| 1913 | DS Section 1 Tool Joint ID | DS1JID | D1JI | F | 4 | Ref | IN | MM | Dimension |
| 1914 | DS Section 1 Tool Joint OD | DS1JOD | D1JO | F | 4 | Ref | IN | MM | Dimension |
| 1915 | DS Section 1 Mass/Length | DS1MASS | D1MA | F | 4 | Ref | LB/F | KG/M | Weight |
| 1916 | DS Section 1 Length | DS1LEN | D1LE | F | 4 | Ref | F | M | Length |
| 1917 | DS Section 2 OD | DS2OD | D2OD | F | 4 | Ref | IN | MM | Dimension |
| 1918 | DS Section 2 ID | DS2ID | D2ID | F | 4 | Ref | IN | MM | Dimension |
| 1919 | DS Section 2 Tool Joint ID | DS2JID | D2JI | F | 4 | Ref | IN | MM | Dimension |
| 1920 | DS Section 2 Tool Joint OD | DS2JOD | D2JO | F | 4 | Ref | IN | MM | Dimension |
| 1921 | DS Section 2 Mass/Length | DS2MASS | D2MA | F | 4 | Ref | LB/F | KG/M | Weight |
| 1922 | DS Section 2 Length | DS2LEN | D2LE | F | 4 | Ref | F | M | Length |
| 1923 | DS Section 3 OD | DS3OD | D3OD | F | 4 | Ref | IN | MM | Dimension |
| 1924 | DS Section 3 ID | DS3ID | D3ID | F | 4 | Ref | IN | MM | Dimension |
| 1925 | DS Section 3 Tool Joint ID | DS3JID | D3JI | F | 4 | Ref | IN | MM | Dimension |
| 1926 | DS Section 3 Tool Joint OD | DS3JOD | D3JO | F | 4 | Ref | IN | MM | Dimension |
| 1927 | DS Section 3 Mass/Length | DS3MASS | D3MA | F | 4 | Ref | LB/F | KG/M | Weight |
| 1928 | DS Section 3 Length | DS3LEN | D3LE | F | 4 | Ref | F | M | Length |
| 1929 | DS Section 4 OD | DS4OD | D4OD | F | 4 | Ref | IN | MM | Dimension |
| 1930 | DS Section 4 ID | DS4ID | D4ID | F | 4 | Ref | IN | MM | Dimension |
| 1931 | DS Section 4 Tool Joint ID | DS4JID | D4JI | F | 4 | Ref | IN | MM | Dimension |
| 1932 | DS Section 4 Tool Joint OD | DS4JOD | D4JO | F | 4 | Ref | IN | MM | Dimension |
| 1933 | DS Section 4 Mass/Length | DS4MASS | D4MA | F | 4 | Ref | LB/F | KG/M | Weight |
| 1934 | DS Section 4 Length | DS4LEN | D4LE | F | 4 | Ref | F | M | Length |
| 1935 | DS Section 5 OD | DS5OD | D5OD | F | 4 | Ref | IN | MM | Dimension |
| 1936 | DS Section 5 ID | DS5ID | D5ID | F | 4 | Ref | IN | MM | Dimension |
| 1937 | DS Section 5 Tool Joint ID | DS5JID | D5JI | F | 4 | Ref | IN | MM | Dimension |
| 1938 | DS Section 5 Tool Joint OD | DS5JOD | D5JO | F | 4 | Ref | IN | MM | Dimension |
| 1939 | DS Section 5 Mass/Length | DS5MASS | D5MA | F | 4 | Ref | LB/F | KG/M | Weight |
| 1940 | DS Section 5 Length | DS5LEN | D5LE | F | 4 | Ref | F | M | Length |
| 1941 | DS Section 6 OD | DS6OD | D6OD | F | 4 | Ref | IN | MM | Dimension |
| 1942 | DS Section 6 ID | DS6ID | D6ID | F | 4 | Ref | IN | MM | Dimension |
| 1943 | DS Section 6 Tool Joint ID | DS6JID | D6JI | F | 4 | Ref | IN | MM | Dimension |
| 1944 | DS Section 6 Tool Joint OD | DS6JOD | D6JO | F | 4 | Ref | IN | MM | Dimension |
| 1945 | DS Section 6 Mass/Length | DS6MASS | D6MA | F | 4 | Ref | LB/F | KG/M | Weight |
| 1946 | Kelly ID | KELLYID | KID | F | 4 | Ref | IN | MM | Dimension |
| 1947 | Kelly Length | KELLYLEN | KLEN | F | 4 | Ref | F | M | Length |
| 1948 | Drill Pipe Stand Length | DPSTDLEN | SLEN | F | 4 | Ref | F | M | Length |
| 1949 | No. Joints/Stand | DPSTDJNT | SJNT | S | 2 | Ref | ---- | ---- | Count |
| 1950 | No. Hole Sections | HOLENUM | HLNO | S | 2 | Ref | ---- | ---- | Count |
| 1951 | Hole Section 1 Diam | HL1DIAM | H1DI | F | 4 | Ref | IN | MM | Dimension |
| 1952 | Hole Section 1 Length | HL1LEN | H1LE | F | 4 | Ref | F | M | Length |
| 1953 | Hole Section 2 Diam | HL2DIAM | H2DI | F | 4 | Ref | IN | MM | Dimension |
| 1954 | Hole Section 2 Length | HL2LEN | H2LE | F | 4 | Ref | F | M | Length |
| 1955 | Hole Section 3 Diam | HL3DIAM | H3DI | F | 4 | Ref | IN | MM | Dimension |
| 1956 | Hole Section 3 Length | HL3LEN | H3LE | F | 4 | Ref | F | M | Length |
| 1957 | Hole Section 4 Diam | HL4DIAM | H4DI | F | 4 | Ref | IN | MM | Dimension |
| 1958 | Hole Section 4 Length | HL4LEN | H4LE | F | 4 | Ref | F | M | Length |
| 1959 | Hole Section 5 Diam | HL5DIAM | H5DI | F | 4 | Ref | IN | MM | Dimension |
| 1960 | Pump 1 Capacity | PUMP1CAP | P1CA | F | 4 | Ref | B/ST | M3ST | Capacity |
| 1961 | Pump 1 Efficiency | PUMP1EFF | P1EF | S | 2 | Ref | % | % | Efficiency |
| 1962 | Pump 2 Capacity | PUMP2CAP | P2CA | F | 4 | Ref | B/ST | M3ST | Capacity |
| 1963 | Pump 2 Efficiency | PUMP2EFF | P2EF | S | 2 | Ref | % | % | Efficiency |
| 1964 | Pump 3 Capacity | PUMP3CAP | P3CA | F | 4 | Ref | B/ST | M3ST | Capacity |
| 1965 | Pump 3 Efficiency | PUMP3EFF | P3EF | S | 2 | Ref | % | % | Efficiency |
| 1966 | Rig Operating Cost/Hour | RIGCOST | RIGC | S | 2 | Ref | $ | ---- | Cost |
| 1967 | Trip Rate (Dist/Time) | TRIPRATE | TRRT | F | 4 | Ref | KF/H | KPH | Speed |
| 1968 | Kill Line ID | KILLID | KLID | F | 4 | Ref | IN | MM | Dimension |
| 1969 | Kill Line Joint ID | KILLJID | KLJD | F | 4 | Ref | IN | MM | Dimension |
| 1970 | Kill Line Joint Fraction | KILLJF | KLJF | S | 2 | Ref | % | % | Fraction |
| 1971 | Kill Line Length | KILLLEN | KLLE | F | 4 | Ref | F | M | Dimension |
| 1972 | Choke Line ID | CHKID | CHID | F | 4 | Ref | IN | MM | Dimension |
| 1973 | Choke Line Joint ID | CHKJID | CHJD | F | 4 | Ref | IN | MM | Dimension |
| 1974 | Choke Line Joint Fraction | CHKJF | CHJF | S | 2 | Ref | % | % | Fraction |
| 1975 | Choke Line Length | CHKLEN | CHLE | F | 4 | Ref | F | M | Length |
| 1976 | Depth Casing Shoe (meas) | DEPTCSGM | DCGM | F | 4 | Obs | F | M | Depth |
| 1977 | Depth Casing Shoe (vert) | DEPTCSGV | DCGV | F | 4 | Cal | F | M | Depth |
| 1978 | Depth PIT (meas) | DEPTPITM | DPTM | F | 4 | Obs | F | M | Depth |
| 1979 | Depth PIT (vert) | DEPTPITV | DPTV | F | 4 | Cal | F | M | Depth |
| 1980 | Frac Pressure Grad at PIT | FPGPIT | FPIT | F | 4 | Ref | PPG | KGM3 | Gradient |
| 1981 | Drilling Contractor | DRLGCONT | CONT | A | 16 | Ref | ---- | ---- | Reference |
| 1982 | Rig Name | RIGNAME | RIG | A | 16 | Ref | ---- | ---- | Reference |
| 1983 | Rig Type | RIGTYPE | RTYP | A | 16 | Ref | ---- | ---- | Reference |
| 1984 | Vendor 1 Name/Service | VENDOR1 | VEN1 | A | 32 | Ref | ---- | ---- | Reference |
| 1985 | Vendor 2 Name/Service | VENDOR2 | VEN2 | A | 32 | Ref | ---- | ---- | Reference |
| 1986 | Vendor 3 Name/Service | VENDOR3 | VEN3 | A | 32 | Ref | ---- | ---- | Reference |
| 1987 | Vendor 4 Name/Service | VENDOR4 | VEN4 | A | 32 | Ref | ---- | ---- | Reference |
| 1988 | Vendor 5 Name/Service | VENDOR5 | VEN5 | A | 32 | Ref | ---- | ---- | Reference |
| 1989 | Vendor 6 Name/Service | VENDOR6 | VEN6 | A | 32 | Ref | ---- | ---- | Reference |
| 1990 | < SPARE 1 > | SPARE1 | SPR1 | F | 4 |  | ---- | ---- | Spare |
| 1991 | < SPARE 2 > | SPARE2 | SPR2 | F | 4 |  | ---- | ---- | Spare |
| 1992 | < SPARE 3 > | SPARE3 | SPR3 | F | 4 |  | ---- | ---- | Spare |
| 1993 | < SPARE 4 > | SPARE4 | SPR4 | F | 4 |  | ---- | ---- | Spare |
| 1994 | < SPARE 5 > | SPARE5 | SPR5 | F | 4 |  | ---- | --- | Spare |