### WITS\_WITSML Record 15 Cuttings and Lithology

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| **WITS Record ID:** 15 | **Logical Record Type:** 165 | **Auto/Manual:** Manual |
| **Trigger:** [EVENT] Transmission is operator-initiated. | | |
| **Data Source:** Manually entered data from sample examination 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 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1501 | Well Identifier | WELLID | WID | A | 16 | Ref | ---- | ---- | Unique Well ID |
| 1502 | Sidetrack/Hole Sect No. | STKNUM | SKNO | S | 2 | Ref | ---- | ---- | Unique Wellbore ID |
| 1503 | Record Identifier | RECID | RID | S | 2 | Ref | ---- | ---- | Identification |
| 1504 | Sequence Identifier | SEQID | SQID | L | 4 | Ref | ---- | ---- | Identification |
| 1505 | Date | DATE | DATE | L | 4 | Dts | ---- | ---- | Date |
| 1506 | Time | TIME | TIME | L | 4 | Dts | ---- | ---- | Time |
| 1507 | Activity Code | ACTCOD | ACTC | S | 2 | Cod | ---- | ---- | Activity |
| 1508 | Depth Sample (meas) | DEPTSAMM | DSAM | F | 4 | Obs | F | M | Depth |
| 1509 | Depth Sample (vert) | DEPTSAMV | DSAV | F | 4 | Cal | F | M | Depth |
| 1510 | Description type | DESCTYPE | DESC | A | 8 | Ref | ---- | ---- | Gas |
| 1511 | Lith 1 type | L1TYPE | L1TY | A | 16 | Ref | ---- | ---- | Gas |
| 1512 | Lith 1 % | L1PERC | L1PC | S | 2 | Obs | % | % | Gas |
| 1513 | Lith 1 classification | L1CLASS | L1CL | A | 16 | Ref | ---- | ---- | Gas |
| 1514 | Lith 1 color | L1COLOR | L1CO | A | 16 | Obs | ---- | ---- | Gas |
| 1515 | Lith 1 texture | L1TEXT | L1TX | A | 16 | Obs | ---- | ---- | Gas |
| 1516 | Lith 1 hardness | L1HARD | L1HD | A | 16 | Obs | ---- | ---- | Gas |
| 1517 | Lith 1 grain size | L1SIZE | L1SZ | A | 16 | Obs | ---- | ---- | Gas |
| 1518 | Lith 1 roundness | L1ROUND | L1RD | A | 16 | Obs | ---- | ---- | Gas |
| 1519 | Lith 1 sorting | L1SORT | L1SO | A | 16 | Obs | ---- | ---- | Gas |
| 1520 | Lith 1 matrix/cement | L1MATCEM | L1MC | A | 16 | Obs | ---- | ---- | Gas |
| 1521 | Lith 1 accessories | L1ACC | L1AC | A | 16 | Obs | ---- | ---- | Gas |
| 1522 | Lith 1 porosity | L1POR | L1PO | F | 4 | Est | % | % | Gas |
| 1523 | Lith 1 permeability | L1PERM | L1PE | F | 4 | Est | MD | MD | Gas |
| 1524 | Lith 2 type | L2TYPE | L2TY | A | 16 | Ref | ---- | ---- | Gas |
| 1525 | Lith 2 % | L2PERC | L2PC | S | 2 | Calc | % | % | Gas |
| 1526 | Lith 2 classification | L2CLASS | L2CL | A | 16 | Ref | ---- | ---- | Gas |
| 1527 | Lith 2 color | L2COLOR | L2CO | A | 16 | Obs | ---- | ---- | Gas |
| 1528 | Lith 2 texture | L2TEXT | L2TX | A | 16 | Obs | ---- | ---- | Gas |
| 1529 | Lith 2 hardness | L2HARD | L2HD | A | 16 | Obs | ---- | ---- | Gas |
| 1530 | Lith 2 grain size | L2SIZE | L2SZ | A | 16 | Obs | ---- | ---- |  |
| 1531 | Lith 2 roundness | L2ROUND | L2RD | A | 16 | Obs | ---- | ---- |  |
| 1532 | Lith 2 sorting | L2SORT | L2SO | A | 16 | Obs | ---- | ---- |  |
| 1533 | Lith 2 matrix/cement | L2MATCEM | L2MC | A | 16 | Obs | ---- | ---- |  |
| 1534 | Lith 2 accessories | L2ACC | L2AC | A | 16 | Obs | ---- | ---- |  |
| 1535 | Lith 2 porosity | L2POR | L2PO | F | 4 | Est | % | % |  |
| 1536 | Lith 2 permeability | L2PERM | L2PE | F | 4 | Est | MD | MD |  |
| 1537 | Lith 3 type | L3TYPE | L3TY | A | 16 | Ref | --- | ---- - |  |
| 1538 | Lith 3 % | L3PERC | L3PC | S | 2 | Cal | % | % |  |
| 1539 | Lith 3 classification | L3CLASS | L3CL | A | 16 | Ref | ---- | ---- |  |
| 1540 | Lith 4 type | L4TYPE | L4TY | A | 16 | Ref | ---- | ---- |  |
| 1541 | Lith 4 % | L4PERC | L4PC | S | 2 | Cal | % | % |  |
| 1542 | Lith 4 classification | L4CLASS | L4CL | A | 16 | Ref | ---- | ---- |  |
| 1543 | Lith 5 type | L5TYPE | L5TY | A | 16 | Ref | ---- | ---- |  |
| 1544 | Lith 5 % | L5PERC | L5PC | S | 2 | Cal | % | % |  |
| 1545 | Lith 5 classification | L5CLASS | L5CL | A | 16 | Ref | ---- | ---- |  |
| 1546 | Fossils | FOSS | FOSS | A | 16 | Obs | ---- | ---- |  |
| 1547 | Composite Show | COMPSHOW | SHOW | A | 16 | Est | ---- | ---- |  |
| 1548 | Bulk Density | BULKDEN | BDEN | F | 4 | Est | G/CC | G/CC |  |
| 1549 | Cuttings Gas | GASCUTT | GCUT | F | 4 | Cal | % | % |  |
| 1550 | Calcimetry Calcite % | CCAL | CCAL | F | 4 | Est | % | % |  |
| 1551 | Calcimetry Dolomite % | CDOL | CDOL | F | 4 | Est | % | % |  |
| 1552 | Cuttings CEC | CEC | CEC | F | 4 | Est | MEHG | MEHG |  |
| 1553 | Cavings % | CAVINGS | CAV | S | 2 | Est | % | % |  |
| 1554 | Shale Density | SHALEDEN | SDEN | F | 4 |  | G/CC | G/CC |  |
| 1555 | < SPARE 1 > | SPARE1 | SPR1 | F | 4 |  | ---- | ---- |  |
| 1556 | < SPARE 2 > | SPARE2 | SPR2 | F | 4 |  | ---- | ---- |  |
| 1557 | < SPARE 3 > | SPARE3 | SPR3 | F | 4 |  | ---- | ---- |  |
| 1558 | < SPARE 4 > | SPARE4 | SPR4 | F | 4 |  | ---- | ---- |  |
| 1559 | < SPARE 5 > | SPARE5 | SPR5 | F | 4 |  | ---- | --- |  |