Default Modbus Register Assignments for Thermo Scientific AutoEXEC/AutoPILOT PRO Flow Computers

Version 30

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1. Default Base Register Number Assignments

The default base register number assignments table is divided into the following groups:

Base Register	Modbus Register Group
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704	Differential Pressure Flow Calculation #1 Hourly History
705	Differential Pressure Flow Calculation #2 Daily History
706	Differential Pressure Flow Calculation #2 Hourly History
707	Differential Pressure Flow Calculation #3 Daily History
708	Differential Pressure Flow Calculation #3 Hourly History
709	Differential Pressure Flow Calculation #4 Daily History
710	Differential Pressure Flow Calculation #4 Hourly History
711	Differential Pressure Flow Calculation #5 Daily History
712	Differential Pressure Flow Calculation #5 Hourly History
713	Differential Pressure Flow Calculation #6 Daily History
714	Differential Pressure Flow Calculation #6 Hourly History
715	Differential Pressure Flow Calculation #7 Daily History
716	Differential Pressure Flow Calculation #7 Hourly History
717	Differential Pressure Flow Calculation #8 Daily History
718	Differential Pressure Flow Calculation #8 Hourly History
719	Differential Pressure Flow Calculation #9 Daily History
720	Differential Pressure Flow Calculation #9 Hourly History
721	Differential Pressure Flow Calculation #10 Daily History
722	Differential Pressure Flow Calculation #10 Hourly History
723	Differential Pressure Flow Calculation #11 Daily History
724	Differential Pressure Flow Calculation #11 Hourly History
725	Differential Pressure Flow Calculation #12 Daily History
726	Differential Pressure Flow Calculation #12 Hourly History
727	Turbine/Ultrasonic Flow Calculation #1 Daily History
728	Turbine/Ultrasonic Flow Calculation #1 Hourly History
729	Turbine/Ultrasonic Flow Calculation #2 Daily History
730	Turbine/Ultrasonic Flow Calculation #2 Hourly History
731	Turbine/Ultrasonic Flow Calculation #3 Daily History
732	Turbine/Ultrasonic Flow Calculation #3 Hourly History
733	Turbine/Ultrasonic Flow Calculation #4 Daily History
734	Turbine/Ultrasonic Flow Calculation #4 Hourly History
735	Turbine/Ultrasonic Flow Calculation #5 Daily History
736	Turbine/Ultrasonic Flow Calculation #5 Hourly History
737	Turbine/Ultrasonic Flow Calculation #6 Daily History

738	Turbine/Ultrasonic Flow Calculation #6 Hourly History
739	Turbine/Ultrasonic Flow Calculation #7 Daily History
740	Turbine/Ultrasonic Flow Calculation #7 Hourly History
741	Turbine/Ultrasonic Flow Calculation #8 Daily History
742	Turbine/Ultrasonic Flow Calculation #8 Hourly History
743	Turbine/Ultrasonic Flow Calculation #9 Daily History
744	Turbine/Ultrasonic Flow Calculation #9 Hourly History
745	Turbine/Ultrasonic Flow Calculation #10 Daily History
746	Turbine/Ultrasonic Flow Calculation #10 Hourly History
747	Turbine/Ultrasonic Flow Calculation #11 Daily History
748	Turbine/Ultrasonic Flow Calculation #11 Hourly History
749	Turbine/Ultrasonic Flow Calculation #12 Daily History
750	Turbine/Ultrasonic Flow Calculation #12 Hourly History
751	Plunger Lift Calculation #1 Minute History
752	Plunger Lift Calculation #1 Cycle History
753	Plunger Lift Calculation #2 Minute History
754	Plunger Lift Calculation #2 Cycle History
755	Plunger Lift Calculation #3 Minute History
756	Plunger Lift Calculation #3 Cycle History
757	Plunger Lift Calculation #4 Minute History
758	Plunger Lift Calculation #4 Cycle History
759	Plunger Lift Calculation #5 Minute History
760	Plunger Lift Calculation #5 Cycle History
761	Spare History Calculation #1 History
762	Spare History Calculation #2 History
763	Spare History Calculation #3 History
764	Spare History Calculation #4 History
765	Spare History Calculation #5 History
766	Spare History Calculation #6 History
767	Spare History Calculation #7 History
768	Spare History Calculation #8 History
769	Spare History Calculation #9 History
770	Spare History Calculation #10 History
771	Spare History Calculation #11 History
772	Spare History Calculation #12 History
800	Liquid Flow Calculation #1 Batch History

801	Liquid Flow Calculation #1 Prover History
802	Liquid Flow Calculation #1 Results History
803	Liquid Flow Calculation #1 Daily History
804	Liquid Flow Calculation #1 Hourly History
805	Liquid Flow Calculation #2 Batch History
806	Liquid Flow Calculation #2 Prover History
807	Liquid Flow Calculation #2 Results History
808	Liquid Flow Calculation #2 Daily History
809	Liquid Flow Calculation #2 Hourly History
810	Liquid Flow Calculation #3 Batch History
811	Liquid Flow Calculation #3 Prover History
812	Liquid Flow Calculation #3 Results History
813	Liquid Flow Calculation #3 Daily History
814	Liquid Flow Calculation #3 Hourly History
815	Liquid Flow Calculation #4 Batch History
816	Liquid Flow Calculation #4 Prover History
817	Liquid Flow Calculation #4 Results History
818	Liquid Flow Calculation #4 Daily History
819	Liquid Flow Calculation #4 Hourly History
820	Liquid Flow Calculation #5 Batch History
821	Liquid Flow Calculation #5 Prover History
822	Liquid Flow Calculation #5 Results History
823	Liquid Flow Calculation #5 Daily History
824	Liquid Flow Calculation #5 Hourly History
825	Liquid Flow Calculation #6 Batch History
826	Liquid Flow Calculation #6 Prover History
827	Liquid Flow Calculation #6 Results History
828	Liquid Flow Calculation #6 Daily History
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831	Liquid Flow Calculation #7 Prover History
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833	Liquid Flow Calculation #7 Daily History
834	Liquid Flow Calculation #7 Hourly History
835	Liquid Flow Calculation #8 Batch History
836	Liquid Flow Calculation #8 Prover History
837	Liquid Flow Calculation #8 Results History
838	Liquid Flow Calculation #8 Daily History
839	Liquid Flow Calculation #8 Hourly History

840	Liquid Flow Calculation #9 Batch History
841	Liquid Flow Calculation #9 Prover History
842	Liquid Flow Calculation #9 Results History
843	Liquid Flow Calculation #9 Daily History
844	Liquid Flow Calculation #9 Hourly History
845	Liquid Flow Calculation #10 Batch History
846	Liquid Flow Calculation #10 Prover History
847	Liquid Flow Calculation #10 Results History
848	Liquid Flow Calculation #10 Daily History
849	Liquid Flow Calculation #10 Hourly History
850	Liquid Flow Calculation #11 Batch History
851	Liquid Flow Calculation #11 Prover History
852	Liquid Flow Calculation #11 Results History
853	Liquid Flow Calculation #11 Daily History
854	Liquid Flow Calculation #11 Hourly History
855	Liquid Flow Calculation #12 Batch History
856	Liquid Flow Calculation #12 Prover History
857	Liquid Flow Calculation #12 Results History
858	Liquid Flow Calculation #12 Daily History
859	Liquid Flow Calculation #12 Hourly History
1001	Starting register for Orifice Meter Run #1 Numbers (16 Byte ASCII)
1002	Starting register for Orifice Meter Run #2 Numbers (16 Byte ASCII)
1003	Starting register for Orifice Meter Run #3 Numbers (16 Byte ASCII)
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N	Starting register for Orifice Meter Run #N Numbers (16 Byte ASCII)
1101	Starting register for Turbine Meter Run #1 Numbers (16 Byte ASCII)
1102	Starting register for Turbine Meter Run #2 Numbers (16 Byte ASCII)
1103	Starting register for Turbine Meter Run #3 Numbers (16 Byte ASCII)
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N	Starting register for Turbine Meter Run #N Numbers (16 Byte ASCII)
1201	Starting register for Orifice Meter Run #1 Names (16 Byte ASCII)
1202	Starting register for Orifice Meter Run #2 Names (16 Byte ASCII)
1203	Starting register for Orifice Meter Run #3 Names (16 Byte ASCII)
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N	Starting register for Orifice Meter Run #N Names (16 Byte ASCII)
1301	Starting register for Turbine Meter Run #1 Names (16 Byte ASCII)
1302	Starting register for Turbine Meter Run #2 Names (16 Byte ASCII)
1303	Starting register for Turbine Meter Run #3 Names (16 Byte ASCII)
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N	Starting register for Turbine Meter Run #N Names (16 Byte ASCII)
2001	Starting register for Physical Analog Input #1 Name (16 Byte ASCII)
2002	Starting register for Physical Analog Input #2 Name (16 Byte ASCII)
2003	Starting register for Physical Analog Input #3 Name (16 Byte ASCII)
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N	Starting register for Physical Analog Input #N Name (16 Byte ASCII)
2101	Starting register for Physical Smart Xducer Input #1 Name (16 Byte ASCII)
2102	Starting register for Physical Smart Xducer Input #2 Name (16 Byte ASCII)
2103	Starting register for Physical Smart Xducer Input #3 Name (16 Byte ASCII)
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N	Starting register for Physical Smart Xducer Input #N Name (16 Byte ASCII)
2201	Starting register for Physical DE Analog Input #1 Name (16 Byte ASCII)
2202	Starting register for Physical DE Analog Input #2 Name (16 Byte ASCII)
2203	Starting register for Physical DE Analog Input #3 Name (16 Byte ASCII)
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N	Starting register for Physical DE Analog Input #N Name (16 Byte ASCII)
2301	Starting register for Physical Discrete Input #1 Name (16 Byte ASCII)
2302	Starting register for Physical Discrete Input #2 Name (16 Byte ASCII)
2303	Starting register for Physical Discrete Input #3 Name (16 Byte ASCII)
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N	Starting register for Physical Discrete Input #N Name (16 Byte ASCII)
2401	Starting register for Physical Accumulator Input #1 Name (16 Byte ASCII)

2402	Starting register for Physical Accumulator Input #2 Name (16 Byte ASCII)
2403	Starting register for Physical Accumulator Input #3 Name (16 Byte ASCII)
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N	Starting register for Physical Accumulator Input #N Name (16 Byte ASCII)
2501	Starting register for Physical Analog Output #1 Name (16 Byte ASCII)
2502	Starting register for Physical Analog Output #2 Name (16 Byte ASCII)
2503	Starting register for Physical Analog Output #3 Name (16 Byte ASCII)
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N	Starting register for Physical Analog Output #N Name (16 Byte ASCII)
2601	Starting register for Physical Discrete Output #1 Name (16 Byte ASCII)
2602	Starting register for Physical Discrete Output #2 Name (16 Byte ASCII)
2603	Starting register for Physical Discrete Output #3 Name (16 Byte ASCII)
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N	Starting register for Physical Discrete Output #N Name (16 Byte ASCII)
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8801	Differential Pressure Flow Calculation #5
9001	Differential Pressure Flow Calculation #6
9201	Differential Pressure Flow Calculation #7
9401	Differential Pressure Flow Calculation #8
9601	Differential Pressure Flow Calculation #9
9801	Differential Pressure Flow Calculation #10
10001	Differential Pressure Flow Calculation #11
10201	Differential Pressure Flow Calculation #12
10501	Turbine/Ultrasonic Flow Calculation #1 (Table 39)
10701	Turbine/Ultrasonic Flow Calculation #2
10901	Turbine/Ultrasonic Flow Calculation #3
11101	Turbine/Ultrasonic Flow Calculation #4
11301	Turbine/Ultrasonic Flow Calculation #5
11501	Turbine/Ultrasonic Flow Calculation #6
11701	Turbine/Ultrasonic Flow Calculation #7
11901	Turbine/Ultrasonic Flow Calculation #8
12101	Turbine/Ultrasonic Flow Calculation #9
12301	Turbine/Ultrasonic Flow Calculation #10
12501	Turbine/Ultrasonic Flow Calculation #11
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13101	Gas Quality Block Data #2
13201	Gas Quality Block Data #3
13301	Gas Quality Block Data #4

13401	Gas Quality Block Data #5
13501	Gas Quality Block Data #6
13601	Gas Quality Block Data #7
13701	Gas Quality Block Data #8
13801	Gas Quality Block Data #9
13901	Gas Quality Block Data #10
14001	Gas Quality Block Data #11
14101	Gas Quality Block Data #12
14201	Gas Quality Block Data #13
14301	Gas Quality Block Data #14
14401	Gas Quality Block Data #15
14501	Gas Quality Block Data #16
14601	Gas Quality Block Data #17
14701	Gas Quality Block Data #18
14801	Gas Quality Block Data #19
14901	Gas Quality Block Data #20
15001	Gas Quality Block Data #21
15101	Gas Quality Block Data #22
15201	Gas Quality Block Data #23
15301	Gas Quality Block Data #24
15401	Gas Quality Block Data #25
15501	Gas Quality Block Data #26
15601	Gas Quality Block Data #27
15701	Gas Quality Block Data #28
15801	Gas Quality Block Data #29
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17501	Liquid Flow Calculation #3
18001	Liquid Flow Calculation #4
18501	Liquid Flow Calculation #5
19001	Liquid Flow Calculation #6
19501	Liquid Flow Calculation #7
20001	Liquid Flow Calculation #8
20501	Liquid Flow Calculation #9
21001	Liquid Flow Calculation #10

21501	Liquid Flow Calculation #11
22001	Liquid Flow Calculation #12
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22701	Liquid Prover Calculation #3
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23001	Liquid Density Table #1 (Table 56)
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23501	Station Control Calculation #1 (Table 57)
23701	Station Control Calculation #2
23901	Station Control Calculation #3
24101	Station Control Calculation #4
24301	Station Control Calculation #5
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24701	Station Control Calculation #7
24901	Station Control Calculation #8
25501	PID Calculation #1 (Table 33)
25601	PID Calculation #2
25701	PID Calculation #3
25801	PID Calculation #4
25901	PID Calculation #5
26001	PID Calculation #6
26101	PID Calculation #7
26201	PID Calculation #8
26301	PID Calculation #9
26401	PID Calculation #10
26501	PID Calculation #11
26601	PID Calculation #12
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26801	PID Calculation #14
26901	PID Calculation #15
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28001	Proportional Control Calculation #1 (Table 34)
28101	Proportional Control Calculation #2
28201	Proportional Control Calculation #3
28301	Proportional Control Calculation #4
28401	Proportional Control Calculation #5
28501	Proportional Control Calculation #6
28601	Proportional Control Calculation #7
28701	Proportional Control Calculation #8
29501	High/Low Select Calculation #1 (Table 35)
29601	High/Low Select Calculation #2
29701	High/Low Select Calculation #3
29801	High/Low Select Calculation #4
29901	High/Low Select Calculation #5
30001	High/Low Select Calculation #6
30101	High/Low Select Calculation #7
30201	High/Low Select Calculation #8
30501	Speed of Sound Calculation #1 (Table 40)
30601	Speed of Sound Calculation #2
30701	Speed of Sound Calculation #3
30801	Speed of Sound Calculation #4
30901	Speed of Sound Calculation #5
31001	Speed of Sound Calculation #6
31101	Speed of Sound Calculation #7
31201	Speed of Sound Calculation #8
31501	Meter Station Calculation #1 (Table 41)
31601	Meter Station Calculation #2
31701	Meter Station Calculation #3
31801	Meter Station Calculation #4
31901	Meter Station Calculation #5
32001	Meter Station Calculation #6

32101	Meter Station Calculation #7
32201	Meter Station Calculation #8
32301	Meter Station Calculation #9
32401	Meter Station Calculation #10
32501	Meter Station Calculation #11
32601	Meter Station Calculation #12
32701	Meter Station Calculation #13
32801	Meter Station Calculation #14
32901	Meter Station Calculation #15
33001	Meter Station Calculation #16
33501	Meter Run Switching #1 (Table 42)
33601	Meter Run Switching #2
33701	Meter Run Switching #3
33801	Meter Run Switching #4
33901	Meter Run Switching #5
34001	Meter Run Switching #6
34101	Meter Run Switching #7
34201	Meter Run Switching #8
34501	Historical Average Calculation #1 (Table 43)
34601	Historical Average Calculation #2
34701	Historical Average Calculation #3
34801	Historical Average Calculation #4
34901	Historical Average Calculation #5
35001	Historical Average Calculation #6
35101	Historical Average Calculation #7
35201	Historical Average Calculation #8
35301	Historical Average Calculation #9
35401	Historical Average Calculation #10
35501	Historical Average Calculation #11
35601	Historical Average Calculation #12
36001	Sampler/Accumulator Calculation #1 (Table 60)
36101	Sampler/Accumulator Calculation #2
36201	Sampler/Accumulator Calculation #3
36301	Sampler/Accumulator Calculation #4
36401	Sampler/Accumulator Calculation #5
36501	Sampler/Accumulator Calculation #6

36601	Sampler/Accumulator Calculation #7
36701	Sampler/Accumulator Calculation #8
37001	Valve Sequencing & Flow Direction Calculation #1 (Table 67)
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37401	Valve Sequencing & Flow Direction Calculation #3
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38001	Chromatograph Communications Block #1 (Table 100)
38101	Chromatograph Communications Block #2
38201	Chromatograph Communications Block #3
38301	Chromatograph Communications Block #4
38401	Chromatograph Communications Block #5
38501	Chromatograph Communications Block #6
38601	Chromatograph Communications Block #7
38701	Chromatograph Communications Block #8
39001	Float Point Multiplexer Calculation #1
39101	Float Point Multiplexer Calculation #2
39201	Float Point Multiplexer Calculation #3
39301	Float Point Multiplexer Calculation #4
39401	Float Point Multiplexer Calculation #5
39501	Float Point Multiplexer Calculation #6
39601	Float Point Multiplexer Calculation #7
39701	Float Point Multiplexer Calculation #8
39801	Float Point Multiplexer Calculation #9
39901	Float Point Multiplexer Calculation #10
40001	Float Point Multiplexer Calculation #11
40101	Float Point Multiplexer Calculation #12
40201	Float Point Multiplexer Calculation #13
40301	Float Point Multiplexer Calculation #14
40401	Float Point Multiplexer Calculation #15
40501	Float Point Multiplexer Calculation #16
41101	Scheduled Copy Calculation #1 (Table 61)
41201	Scheduled Copy Calculation #2
41301	Scheduled Copy Calculation #3
41401	Scheduled Copy Calculation #4
41501	Scheduled Copy Calculation #5

41601	Scheduled Copy Calculation #6
41701	Scheduled Copy Calculation #7
41801	Scheduled Copy Calculation #8
42001	Nomination Calculation #1 (Table 62)
42101	Nomination Calculation #2
42201	Nomination Calculation #3
42301	Nomination Calculation #4
42401	Nomination Calculation #5
42501	Nomination Calculation #6
42601	Nomination Calculation #7
42701	Nomination Calculation #8
43001	Plunger Lift Calculation #1 (Table 65)
43301	Plunger Lift Calculation #2
43601	Plunger Lift Calculation #3
43901	Plunger Lift Calculation #4
44201	Plunger Lift Calculation #5
45001	Tank Gauge Calculation #1 (Table 101)
45101	Tank Gauge Calculation #2
45201	Tank Gauge Calculation #3
45301	Tank Gauge Calculation #4
45401	Tank Gauge Calculation #5
45501	Tank Gauge Calculation #6
46001	Extended Tank Gauge Calculation #1 (Table 101)
46101	Extended Tank Gauge Calculation #2
46201	Extended Tank Gauge Calculation #3
46301	Extended Tank Gauge Calculation #4
46401	Extended Tank Gauge Calculation #5
46501	Extended Tank Gauge Calculation #6

2. Modbus Register Assignments

2.1. Table 1: Floating Point Value Table Entry Modbus Register Assignments

Register Number	Data Description
Base + 0	Floating Point Value Table Entry #1 Value
Base + 1	Floating Point Value Table Entry #2 Value
Base + 2	Floating Point Value Table Entry #3 Value
Base + 3	Floating Point Value Table Entry #4 Value
:	: : : : : :
:	: : : : : :
Base + 48	Floating Point Value Table Entry #49 Value
Base + 49	Floating Point Value Table Entry #50 Value

2.2. Table 2: Discrete Point Value Table Entry Modbus Register Assignments

Register Number	Data Description
Base + 0	Discrete Point Value Table Entry #1 Value
Base + 1	Discrete Point Value Table Entry #2 Value
Base + 2	Discrete Point Value Table Entry #3 Value
Base + 3	Discrete Point Value Table Entry #4 Value
:	: : : : : :
:	: : : : : :
Base + 48	Discrete Point Value Table Entry #49 Value
Base + 49	Discrete Point Value Table Entry #50 Value

2.3. Table 3: Byte Value Table Entry Modbus Register Assignments

Register Number	Data Description
Base + 0	Byte Value Table Entry #1 Value
Base + 1	Byte Value Table Entry #2 Value
Base + 2	Byte Value Table Entry #3 Value
Base + 3	Byte Value Table Entry #4 Value
:	: : : : : :
:	: : : : : :
Base + 48	Byte Value Table Entry #49 Value

Register Number	Data Description
Base + 49	Byte Value Table Entry #50 Value

2.4. Table 4: 16-Bit Word Value Table Entry Modbus Register Assignments

Register Number	Data Description
Base + 0	16-Bit Word Value Table Entry #1 Value
Base + 1	16-Bit Word Value Table Entry #2 Value
Base + 2	16-Bit Word Value Table Entry #3 Value
Base + 3	16-Bit Word Value Table Entry #4 Value
:	: : : : : :
:	: : : : : :
Base + 48	16-Bit Word Value Table Entry #49 Value
Base + 49	16-Bit Word Value Table Entry #50 Value

2.5. Table 16: Physical Analog Input Modbus Register Assignments

Register Number	Data Description
Base + 0	Physical Analog Input #1 Value
Base + 1	Physical Analog Input #2 Value
Base + 2	Physical Analog Input #3 Value
Base + 3	Physical Analog Input #4 Value
Base + 4	Physical Analog Input #5 Value
Base + 5	Physical Analog Input #6 Value
Base + 6	Physical Analog Input #7 Value
Base + 7	Physical Analog Input #8 Value
Base + 8	Physical Analog Input #9 Value
Base + 9	Physical Analog Input #10 Value
Base + 10	Physical Analog Input #11 Value
Base + 11	Physical Analog Input #12 Value
Base + 12	Physical Analog Input #13 Value
Base + 13	Physical Analog Input #14 Value
Base + 14	Physical Analog Input #15 Value
Base + 15	Physical Analog Input #16 Value
Base + 16	Physical Analog Input #17 Value
Base + 17	Physical Analog Input #18 Value
Base + 18	Physical Analog Input #19 Value

Table 16: Physical Analog Input Modbus Register Assignments

Register Number	Data Description
Base + 19	Physical Analog Input #20 Value
Base + 20	Physical Analog Input #21 Value
Base + 21	Physical Analog Input #22 Value
Base + 22	Physical Analog Input #23 Value
Base + 23	Physical Analog Input #24 Value
Base + 24	Physical Analog Input #25 Value
Base + 25	Physical Analog Input #26 Value
Base + 26	Physical Analog Input #27 Value
Base + 27	Physical Analog Input #28 Value
Base + 28	Physical Analog Input #29 Value
Base + 29	Physical Analog Input #30 Value
Base + 30	Physical Analog Input #31 Value
Base + 31	Physical Analog Input #32 Value
Base + 32	Physical Analog Input #33 Value
Base + 33	Physical Analog Input #34 Value
Base + 34	Physical Analog Input #35 Value
Base + 35	Physical Analog Input #36 Value
Base + 36	Physical Analog Input #37 Value
Base + 37	Physical Analog Input #38 Value
Base + 38	Physical Analog Input #39 Value
Base + 39	Physical Analog Input #40 Value
Base + 40	Physical Analog Input #41 Value
Base + 41	Physical Analog Input #42 Value
Base + 42	Physical Analog Input #43 Value
Base + 43	Physical Analog Input #44 Value
Base + 44	Physical Analog Input #45 Value
Base + 45	Physical Analog Input #46 Value
Base + 46	Physical Analog Input #47 Value
Base + 47	Physical Analog Input #48 Value
Base + 48	Physical Analog Input #49 Value
Base + 49	Physical Analog Input #50 Value

2.6. Table 17: Physical Smart Transducer Input Modbus Register Assignments

Register Number	Data Description
Base + 0	Physical Smart Transducer Input #1 Value
Base + 1	Physical Smart Transducer Input #2 Value
Base + 2	Physical Smart Transducer Input #3 Value
Base + 3	Physical Smart Transducer Input #4 Value
Base + 4	Physical Smart Transducer Input #5 Value
Base + 5	Physical Smart Transducer Input #6 Value
Base + 6	Physical Smart Transducer Input #7 Value
Base + 7	Physical Smart Transducer Input #8 Value
Base + 8	Physical Smart Transducer Input #9 Value
Base + 9	Physical Smart Transducer Input #10 Value
Base + 10	Physical Smart Transducer Input #11 Value
Base + 11	Physical Smart Transducer Input #12 Value
Base + 12	Physical Smart Transducer Input #13 Value
Base + 13	Physical Smart Transducer Input #14 Value
Base + 14	Physical Smart Transducer Input #15 Value
Base + 15	Physical Smart Transducer Input #16 Value
Base + 16	Physical Smart Transducer Input #17 Value
Base + 17	Physical Smart Transducer Input #18 Value
Base + 18	Physical Smart Transducer Input #19 Value
Base + 19	Physical Smart Transducer Input #20 Value
Base + 20	Physical Smart Transducer Input #21 Value
Base + 21	Physical Smart Transducer Input #22 Value
Base + 22	Physical Smart Transducer Input #23 Value
Base + 23	Physical Smart Transducer Input #24 Value
Base + 24	Physical Smart Transducer Input #25 Value
Base + 25	Physical Smart Transducer Input #26 Value
Base + 26	Physical Smart Transducer Input #27 Value
Base + 27	Physical Smart Transducer Input #28 Value
Base + 28	Physical Smart Transducer Input #29 Value

Register Number	Data Description
Base + 29	Physical Smart Transducer Input #30 Value
Base + 30	Physical Smart Transducer Input #31 Value
Base + 31	Physical Smart Transducer Input #32 Value
Base + 32	Physical Smart Transducer Input #33 Value
Base + 33	Physical Smart Transducer Input #34 Value
Base + 34	Physical Smart Transducer Input #35 Value
Base + 35	Physical Smart Transducer Input #36 Value
Base + 36	Physical Smart Transducer Input #37 Value
Base + 37	Physical Smart Transducer Input #38 Value
Base + 38	Physical Smart Transducer Input #39 Value
Base + 39	Physical Smart Transducer Input #40 Value
Base + 40	Physical Smart Transducer Input #41 Value
Base + 41	Physical Smart Transducer Input #42 Value
Base + 42	Physical Smart Transducer Input #43 Value
Base + 43	Physical Smart Transducer Input #44 Value
Base + 44	Physical Smart Transducer Input #45 Value
Base + 45	Physical Smart Transducer Input #46 Value
Base + 46	Physical Smart Transducer Input #47 Value
Base + 47	Physical Smart Transducer Input #48 Value
Base + 48	Physical Smart Transducer Input #49 Value
Base + 49	Physical Smart Transducer Input #50 Value

2.7. Table 18: Physical Honeywell DE Input Modbus Register Assignments

Register Number	Data Description
Base + 0	Physical Honeywell DE Input #1 Value
Base + 1	Physical Honeywell DE Input #2 Value
Base + 2	Physical Honeywell DE Input #3 Value
Base + 3	Physical Honeywell DE Input #4 Value
Base + 4	Physical Honeywell DE Input #5 Value
Base + 5	Physical Honeywell DE Input #6 Value
Base + 6	Physical Honeywell DE Input #7 Value
Base + 7	Physical Honeywell DE Input #8 Value
Base + 8	Physical Honeywell DE Input #9 Value
Base + 9	Physical Honeywell DE Input #10 Value
Base + 10	Physical Honeywell DE Input #11 Value
Base + 11	Physical Honeywell DE Input #12 Value
Base + 12	Physical Honeywell DE Input #13 Value
Base + 13	Physical Honeywell DE Input #14 Value

Table 18: Physical Honeywell DE Input Modbus Register Assignments

Register Number	Data Description
Base + 14	Physical Honeywell DE Input #15 Value
Base + 15	Physical Honeywell DE Input #16 Value
Base + 16	Physical Honeywell DE Input #17 Value
Base + 17	Physical Honeywell DE Input #18 Value
Base + 18	Physical Honeywell DE Input #19 Value
Base + 19	Physical Honeywell DE Input #20 Value
Base + 20	Physical Honeywell DE Input #21 Value
Base + 21	Physical Honeywell DE Input #22 Value
Base + 22	Physical Honeywell DE Input #23 Value
Base + 23	Physical Honeywell DE Input #24 Value
Base + 24	Physical Honeywell DE Input #25 Value
Base + 25	Physical Honeywell DE Input #26 Value
Base + 26	Physical Honeywell DE Input #27 Value
Base + 27	Physical Honeywell DE Input #28 Value
Base + 28	Physical Honeywell DE Input #29 Value
Base + 29	Physical Honeywell DE Input #30 Value
Base + 30	Physical Honeywell DE Input #31 Value
Base + 31	Physical Honeywell DE Input #32 Value
Base + 32	Physical Honeywell DE Input #33 Value
Base + 33	Physical Honeywell DE Input #34 Value
Base + 34	Physical Honeywell DE Input #35 Value
Base + 35	Physical Honeywell DE Input #36 Value
Base + 36	Physical Honeywell DE Input #37 Value
Base + 37	Physical Honeywell DE Input #38 Value
Base + 38	Physical Honeywell DE Input #39 Value
Base + 39	Physical Honeywell DE Input #40 Value
Base + 40	Physical Honeywell DE Input #41 Value
Base + 41	Physical Honeywell DE Input #42 Value
Base + 42	Physical Honeywell DE Input #43 Value
Base + 43	Physical Honeywell DE Input #44 Value
Base + 44	Physical Honeywell DE Input #45 Value
Base + 45	Physical Honeywell DE Input #46 Value
Base + 46	Physical Honeywell DE Input #47 Value
Base + 47	Physical Honeywell DE Input #48 Value
Base + 48	Physical Honeywell DE Input #49 Value
Base + 49	Physical Honeywell DE Input #50 Value

2.8. Table 19: Physical Discrete Input Modbus Register Assignments

Register Number	Data Description
Base + 0	Physical Discrete Input #1 Value
Base + 1	Physical Discrete Input #2 Value
Base + 2	Physical Discrete Input #3 Value
Base + 3	Physical Discrete Input #4 Value
Base + 4	Physical Discrete Input #5 Value
Base + 5	Physical Discrete Input #6 Value
Base + 6	Physical Discrete Input #7 Value
Base + 7	Physical Discrete Input #8 Value
Base + 8	Physical Discrete Input #9 Value
Base + 9	Physical Discrete Input #10 Value
Base + 10	Physical Discrete Input #11 Value
Base + 11	Physical Discrete Input #12 Value
Base + 12	Physical Discrete Input #13 Value
Base + 13	Physical Discrete Input #14 Value
Base + 14	Physical Discrete Input #15 Value
Base + 15	Physical Discrete Input #16 Value
Base + 16	Physical Discrete Input #17 Value
Base + 17	Physical Discrete Input #18 Value
Base + 18	Physical Discrete Input #19 Value
Base + 19	Physical Discrete Input #20 Value
Base + 20	Physical Discrete Input #21 Value
Base + 21	Physical Discrete Input #22 Value
Base + 22	Physical Discrete Input #23 Value
Base + 23	Physical Discrete Input #24 Value
Base + 24	Physical Discrete Input #25 Value
Base + 25	Physical Discrete Input #26 Value
Base + 26	Physical Discrete Input #27 Value
Base + 27	Physical Discrete Input #28 Value

Register Number	Data Description
Base + 28	Physical Discrete Input #29 Value
Base + 29	Physical Discrete Input #30 Value
Base + 30	Physical Discrete Input #31 Value
Base + 31	Physical Discrete Input #32 Value
Base + 32	Physical Discrete Input #33 Value
Base + 33	Physical Discrete Input #34 Value
Base + 34	Physical Discrete Input #35 Value
Base + 35	Physical Discrete Input #36 Value
Base + 36	Physical Discrete Input #37 Value
Base + 37	Physical Discrete Input #38 Value
Base + 38	Physical Discrete Input #39 Value
Base + 39	Physical Discrete Input #40 Value
Base + 40	Physical Discrete Input #41 Value
Base + 41	Physical Discrete Input #42 Value
Base + 42	Physical Discrete Input #43 Value
Base + 43	Physical Discrete Input #44 Value
Base + 44	Physical Discrete Input #45 Value
Base + 45	Physical Discrete Input #46 Value
Base + 46	Physical Discrete Input #47 Value
Base + 47	Physical Discrete Input #48 Value
Base + 48	Physical Discrete Input #49 Value
Base + 49	Physical Discrete Input #50 Value

2.9. Table 20: Physical Accumulator Input Modbus Register Assignments

Register Number	Data Description
Base + 0	Physical Accumulator Input #1 Value
Base + 1	Physical Accumulator Input #2 Value
Base + 2	Physical Accumulator Input #3 Value
Base + 3	Physical Accumulator Input #4 Value
Base + 4	Physical Accumulator Input #5 Value
Base + 5	Physical Accumulator Input #6 Value
Base + 6	Physical Accumulator Input #7 Value
Base + 7	Physical Accumulator Input #8 Value
Base + 8	Physical Accumulator Input #9 Value
Base + 9	Physical Accumulator Input #10 Value
Base + 10	Physical Accumulator Input #11 Value
Base + 11	Physical Accumulator Input #12 Value
Base + 12	Physical Accumulator Input #13 Value

Table 20: Physical Accumulator Input Modbus Register Assignments

Register Number	Data Description
Base + 13	Physical Accumulator Input #14 Value
Base + 14	Physical Accumulator Input #15 Value
Base + 15	Physical Accumulator Input #16 Value
Base + 16	Physical Accumulator Input #17 Value
Base + 17	Physical Accumulator Input #18 Value
Base + 18	Physical Accumulator Input #19 Value
Base + 19	Physical Accumulator Input #20 Value
Base + 20	Physical Accumulator Input #21 Value
Base + 21	Physical Accumulator Input #22 Value
Base + 22	Physical Accumulator Input #23 Value
Base + 23	Physical Accumulator Input #24 Value
Base + 24	Physical Accumulator Input #25 Value
Base + 25	Physical Accumulator Input #26 Value
Base + 26	Physical Accumulator Input #27 Value
Base + 27	Physical Accumulator Input #28 Value
Base + 28	Physical Accumulator Input #29 Value
Base + 29	Physical Accumulator Input #30 Value
Base + 30	Physical Accumulator Input #31 Value
Base + 31	Physical Accumulator Input #32 Value
Base + 32	Physical Accumulator Input #33 Value
Base + 33	Physical Accumulator Input #34 Value
Base + 34	Physical Accumulator Input #35 Value
Base + 35	Physical Accumulator Input #36 Value
Base + 36	Physical Accumulator Input #37 Value
Base + 37	Physical Accumulator Input #38 Value
Base + 38	Physical Accumulator Input #39 Value
Base + 39	Physical Accumulator Input #40 Value
Base + 40	Physical Accumulator Input #41 Value
Base + 41	Physical Accumulator Input #42 Value
Base + 42	Physical Accumulator Input #43 Value
Base + 43	Physical Accumulator Input #44 Value
Base + 44	Physical Accumulator Input #45 Value
Base + 45	Physical Accumulator Input #46 Value
Base + 46	Physical Accumulator Input #47 Value
Base + 47	Physical Accumulator Input #48 Value
Base + 48	Physical Accumulator Input #49 Value
Base + 49	Physical Accumulator Input #50 Value

2.10. Table 21: Physical Analog Output Modbus Register Assignments

Register Number	Data Description
Base + 0	Physical Analog Output #1 Value
Base + 1	Physical Analog Output #2 Value
Base + 2	Physical Analog Output #3 Value
Base + 3	Physical Analog Output #4 Value
Base + 4	Physical Analog Output #5 Value
Base + 5	Physical Analog Output #6 Value
Base + 6	Physical Analog Output #7 Value
Base + 7	Physical Analog Output #8 Value
Base + 8	Physical Analog Output #9 Value
Base + 9	Physical Analog Output #10 Value
Base + 10	Physical Analog Output #11 Value
Base + 11	Physical Analog Output #12 Value
Base + 12	Physical Analog Output #13 Value
Base + 13	Physical Analog Output #14 Value
Base + 14	Physical Analog Output #15 Value
Base + 15	Physical Analog Output #16 Value
Base + 16	Physical Analog Output #17 Value
Base + 17	Physical Analog Output #18 Value
Base + 18	Physical Analog Output #19 Value
Base + 19	Physical Analog Output #20 Value
Base + 20	Physical Analog Output #21 Value
Base + 21	Physical Analog Output #22 Value
Base + 22	Physical Analog Output #23 Value
Base + 23	Physical Analog Output #24 Value
Base + 24	Physical Analog Output #25 Value
Base + 25	Physical Analog Output #26 Value
Base + 26	Physical Analog Output #27 Value
Base + 27	Physical Analog Output #28 Value

Register Number	Data Description
Base + 28	Physical Analog Output #29 Value
Base + 29	Physical Analog Output #30 Value
Base + 30	Physical Analog Output #31 Value
Base + 31	Physical Analog Output #32 Value
Base + 32	Physical Analog Output #33 Value
Base + 33	Physical Analog Output #34 Value
Base + 34	Physical Analog Output #35 Value
Base + 35	Physical Analog Output #36 Value
Base + 36	Physical Analog Output #37 Value
Base + 37	Physical Analog Output #38 Value
Base + 38	Physical Analog Output #39 Value
Base + 39	Physical Analog Output #40 Value
Base + 40	Physical Analog Output #41 Value
Base + 41	Physical Analog Output #42 Value
Base + 42	Physical Analog Output #43 Value
Base + 43	Physical Analog Output #44 Value
Base + 44	Physical Analog Output #45 Value
Base + 45	Physical Analog Output #46 Value
Base + 46	Physical Analog Output #47 Value
Base + 47	Physical Analog Output #48 Value
Base + 48	Physical Analog Output #49 Value
Base + 49	Physical Analog Output #50 Value

2.11. Table 22: Physical Discrete Output Modbus Register Assignments

Register Number	Data Description
Base + 0	Physical Discrete Output #1 Value
Base + 1	Physical Discrete Output #2 Value
Base + 2	Physical Discrete Output #3 Value
Base + 3	Physical Discrete Output #4 Value
Base + 4	Physical Discrete Output #5 Value
Base + 5	Physical Discrete Output #6 Value
Base + 6	Physical Discrete Output #7 Value
Base + 7	Physical Discrete Output #8 Value
Base + 8	Physical Discrete Output #9 Value
Base + 9	Physical Discrete Output #10 Value
Base + 10	Physical Discrete Output #11 Value
Base + 11	Physical Discrete Output #12 Value
Base + 12	Physical Discrete Output #13 Value

Table 22: Physical Discrete Output Modbus Register Assignments

Register Number	Data Description
Base + 13	Physical Discrete Output #14 Value
Base + 14	Physical Discrete Output #15 Value
Base + 15	Physical Discrete Output #16 Value
Base + 16	Physical Discrete Output #17 Value
Base + 17	Physical Discrete Output #18 Value
Base + 18	Physical Discrete Output #19 Value
Base + 19	Physical Discrete Output #20 Value
Base + 20	Physical Discrete Output #21 Value
Base + 21	Physical Discrete Output #22 Value
Base + 22	Physical Discrete Output #23 Value
Base + 23	Physical Discrete Output #24 Value
Base + 24	Physical Discrete Output #25 Value
Base + 25	Physical Discrete Output #26 Value
Base + 26	Physical Discrete Output #27 Value
Base + 27	Physical Discrete Output #28 Value
Base + 28	Physical Discrete Output #29 Value
Base + 29	Physical Discrete Output #30 Value
Base + 30	Physical Discrete Output #31 Value
Base + 31	Physical Discrete Output #32 Value
Base + 32	Physical Discrete Output #33 Value
Base + 33	Physical Discrete Output #34 Value
Base + 34	Physical Discrete Output #35 Value
Base + 35	Physical Discrete Output #36 Value
Base + 36	Physical Discrete Output #37 Value
Base + 37	Physical Discrete Output #38 Value
Base + 38	Physical Discrete Output #39 Value
Base + 39	Physical Discrete Output #40 Value
Base + 40	Physical Discrete Output #41 Value
Base + 41	Physical Discrete Output #42 Value
Base + 42	Physical Discrete Output #43 Value
Base + 43	Physical Discrete Output #44 Value
Base + 44	Physical Discrete Output #45 Value
Base + 45	Physical Discrete Output #46 Value
Base + 46	Physical Discrete Output #47 Value
Base + 47	Physical Discrete Output #48 Value
Base + 48	Physical Discrete Output #49 Value
Base + 49	Physical Discrete Output #50 Value

2.12. Table 30: System Status Modbus Register Assignments

Register Number	Data Description
Base + 0	Last Start Up Type
Base + 1	Last System Start Date
Base + 2	Last System Start Time
Base + 3	RTU Device Type (TBD)
Base + 4	RTU Software Version Number
Base + 5	Configuration Execution Status
Base + 6	Configuration Execution Date
Base + 7	Configuration Execution Time
Base + 8	Configuration File Load Status
Base + 9	Configuration File Load Date
Base + 10	Configuration File Load Time
Base + 11	Configuration File Size
Base + 12	ISaGraph Execution Status
Base + 13	ISaGraph Execution Date
Base + 14	ISaGraph Execution Time
Base + 15	ISaGraph File Load Status
Base + 16	ISaGraph File Load Date
Base + 17	ISaGraph File Load Time
Base + 18	ISaGraph File Size
Base + 19	Low Voltage Alarm Status
Base + 20	I/O Board Failure Alarm
Base + 21	Number of I/O Boards Installed
Base + 22	Number of Physical Analog Inputs
Base + 23	Number of Physical Smart Transducers Inputs
Base + 24	Number of Physical Honeywell DE Inputs
Base + 25	Number of Accumulator Inputs
Base + 26	Number of Physical Discrete Inputs
Base + 27	Number of Physical Analog Outputs

Table 30: System Status Modbus Register Assignments

Register Number	Data Description
Base + 28	Number of Physical Discrete Outputs
Base + 29	Reserved for future I/O
Base + 30	Reserved for future I/O
Base + 31	Reserved for future I/O
Base + 32	Reserved for future I/O
Base + 33	Reserved for future I/O
Base + 34	Reserved for future I/O
Base + 35	Reserved for future I/O
Base + 36	Reserved for future I/O
Base + 37	Reserved for future I/O
Base + 38	Number of Pages of Dynamic RAM
Base + 39	Number of Pages of Static RAM
Base + 40	Number of Pages of Flash
Base + 41	Number of Pages of EEPROM
Base + 42	Number of Expansion Serial Ports
Base + 43	Number of USB Host Ports
Base + 44	Number of USB Slave Ports
Base + 45	Number of Ethernet Ports
Base + 46	Historical Data Log #1 File Size
Base + 47	Historical Data Log #2 File Size
:	:
:	:
Base + 109	Historical Data Log #64 File Size
Base + 110	Historical Audit/Alarm Data Log #1 File Size
Base + 111	Historical Audit/Alarm Data Log #2 File Size
:	:
:	:
Base + 173	Historical Audit/Alarm Data Log #64 File Size
Base + 174	Battery Voltage
Base + 175	Entry Logged to Event Log
Base + 176	RTC Low Battery
Base + 177	Number of Active (Enabled) Plungers

2.13. Table 31: System Control Modbus Register Assignments

Register Number	Data Description
Base + 0	System Date
Base + 1	System Time
Base + 2	Display Scroll Time (seconds)
Base + 3	Daylight Savings Time Auto-Adjust
Base + 4	Enter Daylight Savings Time Month
Base + 5	Enter Daylight Savings Time Sunday
Base + 6	Exit Daylight Savings Time Month
Base + 7	Exit Daylight Savings Time Sunday
Base + 8	Configuration Execution Control
Base + 9	Configuration Load Control
Base + 10	ISaGraph Execution Control
Base + 11	ISaGraph Load Control
Base + 12	Host Communications Address (overrides Table 96, Item 1 Entry)
Base + 13	Host Communications Baud Rate (overrides Table 96, Item 1 Entry)
Base + 14	Host Communications Data Bits (overrides Table 96, Item 1 Entry)
Base + 15	Host Communications Parity (overrides Table 96, Item 1 Entry)
Base + 16	Host Communications Stop Bits (overrides Table 96, Item 1 Entry)
Base + 17	Host Communications RTS Delay (milliseconds) (overrides Table 96, Item 1 Entry), 10 mSec Resolution
Base + 18	Host Communications Handshaking (overrides Table 96, Item 1 Entry)
Base + 19	Host Communications Protocol (overrides Table 96, Item 1 Entry)
Base + 20	Host Communications Options (Bit Encoded TBD) (overrides Table 96, Item 1 Entry)
Base + 21	I/O Rescan – (Big Red Button) – Forces rescan of all I/O boards to establish I/O point count.
Base + 22	Date Display Format – Specifies the date formatting for front panel display
Base + 23	Restart to Bootloader
Base + 24	Cold Start
Base + 25	Reserved
Base + 26	Reserved

Register Number	Data Description
Base + 27	Reserved
Base + 28	Reserved
Base + 29	Reserved
Base + 30	Reserved
Base + 31	Reserved
Base + 32	Reserved
Base + 33	LCD Display Contrast 0-20
Base + 34	Reserved
Base + 35	Reserved
Base + 36	Reserved
Base + 37	Reserved
Base + 38	Reserved
Base + 39	Reserved
Base + 40	Reserved
Base + 41	Reserved
Base + 42	Reserved
Base + 43	Reserved
Base + 44	Reserved
Base + 45	Reserved
Base + 46	Reserved
Base + 47	Reserved
Base + 48	Battery Alarm Limit
Base + 49	Reserved
Base + 50	Reserved

2.14. Table 33: PID Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	PID Calculation ID
Base + 1	PID Enable
Base + 2	PID Manual/Automatic Mode
	0 = Manual Mode 1 = Automatic Mode
Base + 3	PID Failure Status
	0 = Normal 1 = Failed
Base + 4	PID Control Mode
	0 = Local 1 = Remote
Base + 5	PID Local Setpoint

Table 33: PID Calculation Modbus Register Assignments

Register Number	Data Description
Base + 6	PID Remote Setpoint
Base + 7	PID Remote Setpoint Load
Base + 8	PID Operating Setpoint
Base + 9	PID Maximum Setpoint
Base + 10	PID Ramping Setpoint
Base + 11	PID Setpoint Ramp Rate
Base + 12	PID Maximum PV
Base + 13	PID Setpoint Copy Enable
Base + 14	PID Proportional Term
Base + 15	PID Integral Term
Base + 16	PID Derivative Term
Base + 17	PID Error Deadband
Base + 18	PID Action
	0 = Forward 1 = Reverse
Base + 19	PID Setpoint Track
	0 = Disabled 1 = Enabled (setpoint tracks PV when in Manual Mode)
Base + 20	PID Fail Mode
	0 = Fail Fixed 1 = Fail Open 2 = Fail Closed
Base + 21	PID Fail Mask
	Bit 0 – Manual Override Bit 1 – In Calibration Bit 2 – I/O Failed Bit 3 – Undefined Bit 4 – Low Alarm Bit 5 – High Alarm Bit 6 – Low Low Alarm Bit 7 – High High Alarm Bits 8–12 – Undefined Bit 13 – Default Value in Use Bit 14 – Out of Range (Warning) Bit 15 – Undefined
Base + 22	PID Process Variable #1
Base + 23	PID Process Variable #2
Base + 24	PID Process Variable #3
Base + 25	PID Process Variable #4
Base + 26	PID Process Variable #5
Base + 27	PID Process Variable #6

Register Number	Data Description
Base + 28	PID Process Variable #7
Base + 29	PID Process Variable #8
Base + 30	PID Process Variable #9
Base + 31	PID Process Variable #10
Base + 32	PID Total Process Variable
Base + 33	PID Output Value
Base + 34	PID Output Mode
	0 = Analog Output 1 = Discrete Output
Base + 35	PID Open Discrete Output
Base + 36	PID Close Discrete Output
Base + 37	PID Maximum Output Change
Base + 38	PID Remote Setpoint Load Command Required
	0 = Remote Setpoint Load Not Required 1 = Remote Setpoint Load Required

2.15. Table 34: Proportional Output Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	Proportional Output Calculation ID
Base + 1	Proportional Output Enable
Base + 2	Proportional Output Manual/Automatic Mode
	0 = Manual Mode 1 = Automatic Mode
Base + 3	Proportional Output Failure Status
	0 = Normal 1 = Failed
Base + 4	Minimum Scale
Base + 5	Maximum Scale
Base + 6	Proportional Action
	0 = Forward 1 = Reverse
Base + 7	Proportional Fail Mode
	0 = Fail Fixed 1 = Fail to Maximum Scale 2 = Fail to Minimum Scale
Base + 8	Proportional Fail Mask
	Bit 0 – Manual Override Bit 1 – In Calibration Bit 2 – I/O Failed Bit 3 – Undefined

Register Number	Data Description
	Bit 4 – Low Alarm Bit 5 – High Alarm Bit 6 – Low Low Alarm Bit 7 – High High Alarm Bits 8–12 – Undefined Bit 13 – Default Value in Use Bit 14 – Out of Range (Warning) Bit 15 – Undefined
Base + 9	Proportional Process Variable #1
Base + 10	Proportional Process Variable #2
Base + 11	Proportional Process Variable #3
Base + 12	Proportional Process Variable #4
Base + 13	Proportional Process Variable #5
Base + 14	Proportional Process Variable #6
Base + 15	Proportional Process Variable #7
Base + 16	Proportional Process Variable #8
Base + 17	Proportional Process Variable #9
Base + 18	Proportional Process Variable #10
Base + 19	Proportional Total Process Variable
Base + 20	Proportional Output Value

2.16. Table 35: High/Low Select Modbus Register Assignments

Register Number	Data Description
Base + 0	High/Low Select Calculation ID
Base + 1	High/Low Select Enable
Base + 2	High/Low Select Mode
	0 = Select Low Value 1 = Select High Value
Base + 3	High/Low Select Copy Enable
	0 = No Copy 1 = Copy Selected Output Value to Process Variables
Base + 4	High/Low Select Number of Inputs
Base + 5	High/Low Select Process Variable #1
Base + 6	High/Low Select Process Variable #2
Base + 7	High/Low Select Process Variable #3
Base + 8	High/Low Select Process Variable #4
Base + 9	High/Low Select Process Variable #5
Base + 10	High/Low Select Process Variable #6
Base + 11	High/Low Select Process Variable #7
Base + 12	High/Low Select Process Variable #8

Register Number	Data Description
Base + 13	High/Low Select Process Variable #9
Base + 14	High/Low Select Process Variable #10
Base + 15	High/Low Select Output Value
Base + 16	High/Low Select Selected Index

2.17. Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	DP Flow Calculation Enable
Base + 1	DP Flow Calculation Descriptor Text – Text Table Index
Base + 2	DP Flow Calculation ID
Base + 3	DP Flow Calculation Method
	0 = AGA 2530-1992 1 = AGA 3-1985 2 = GOST 8.563-97 3 = V-Cone 4 = Slotted Orifice 5 = ISO 5167 6 = GOST 8.586-2005 7 = ISA 1932 8= NIST 14
Base + 4	Fpv Calculation Method
	0 = NX-19 1 = NX-19 Analysis 2 = AGA8 Short 3 = AGA8 Gross 4 = AGA8 Detail 5 = GERG91 Mod 6 = Constant 1.0 7 = NX19Mod
Base + 5	Pipe Diameter
Base + 6	Orifice/Primary Device Size
Base + 7	Atmospheric Pressure
Base + 8	Pressure Base
Base + 9	Temperature Base
Base + 10	Pipe Thermal Expansion Coefficient
Base + 11	Orifice/Primary Device Thermal Expansion Coefficient

Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 12	Isentropic Exponent
Base + 13	Calculation Specific FP Configuration Parameter #1 DP Flow Calculation Method
	0 = AGA 2530-1992 = AGA2530 Orif Ref Temp 1 = AGA 3 – 1985 = AGA3 Tap Location 2 = GOST = Orif Edge Radius 3 = V-Cone = Cal Temp 4 = Slotted Orifice = Beta
Base + 14	Calculation Specific FP Configuration Parameter #2 DP Flow Calculation Method
	0 = AGA 2530-1992 = AGA2530 Pipe Ref temp 1 = AGA 3 – 1985 = AGA3 Tap Config 2 = GOST = Pipe Wall Roughness 3 = V-Cone = Flow Coefficient 4 = Slotted Orifice = Gas Viscosity
Base + 15	Calculation Specific FP Configuration Parameter #3 DP Flow Calculation Method
	0 = AGA 2530-1992 = AGA2530 Tap Location 4 = Slotted Orifice = Meter A Constant 8 = NIST 14 = Base Density
Base + 16	Calculation Specific FP Configuration Parameter #4 DP Flow Calculation Method
	4 = Slotted Orifice = Meter B Constant 8 = NIST 14 = Base Viscosity
Base + 17	Calculation Specific FP Configuration Parameter #5 DP Flow Calculation Method
	4 = Slotted Orifice = Meter E Constant 8 = NIST 14 = Base Heat Ratio
Base + 18	Calculation Specific FP Configuration Parameter #6 DP Flow Calculation Method
	4 = Slotted Orifice = Meter F Constant 8 = NIST 14 = Flowing Density
Base + 19	Calculation Specific FP Configuration Parameter #7 DP Flow Calculation Method 8 = NIST 14 = Flowing Viscosity
Base + 20	Calculation Specific FP Configuration Parameter #8 DP Flow Calculation Method 8 = NIST 14 = Flowing Heat Ratio
Base + 21	Calculation Specific FP Configuration Parameter #9
Base + 22	Calculation Specific FP Configuration Parameter #10
Base + 23	Calculation Specific FP Configuration Parameter #11
Base + 24	Calculation Specific FP Configuration Parameter #12

Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 25	Calculation Specific Discrete Configuration Parameter #13
Base + 26	Calculation Specific Discrete Configuration Parameter #14
Base + 27	Break Log upon Gas Quality Change
	0 = No Log Break 1 = Break Log
Base + 28	Log Gas Quality Audits
	0 = Don't Log GQ Audits 1 = Log GQ Audits
Base + 29	Calculation Specific Byte Configuration Parameter #17 DP Flow Calculation Method
	0 = AGA 2530-1992 = Tap Location 0 = Downstream 1 = Upstream 1 = AGA 3-1985 = Tap Location 0 = Downstream 1 = Upstream
Base + 30	Calculation Specific Byte Configuration Parameter #18 DP Flow Calculation Method
	0 = AGA 2530-1992 = N/A 1 = AGA 3 – 1985 = Tap Config 0 = Flange 1 = Pipe
Base + 31	Calculation Specific Byte Configuration Parameter #19
Base + 32	Calculation Specific Byte Configuration Parameter #20
Base + 33	Low Differential Pressure Cutoff
Base + 34	Manual Flow Cutoff
	0 = Normal Flow Measurement 1 = Forced Flow Cutoff
Base + 35	Differential Pressure
Base + 36	Static Pressure
Base + 37	Static Pressure Gauge/Absolute
	0 = Gauge Pressure 1 = Absolute Pressure
Base + 38	Gas Temperature
Base + 39	Gas Quality Data Definition Block Index
Base + 40	Pipe/Orifice/Primary Device Size Engineering Units
Base + 41	Atmospheric Pressure Engineering Units
Base + 42	Differential Pressure Engineering Units
Base + 43	Static Pressure Engineering Units
Base + 44	Temperature Engineering Units
Base + 45	Volume Engineering Units

Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 46	Flow Rate Engineering Units
Base + 47	Energy Engineering Units
Base + 48	Energy Rate Engineering Units
Base + 49	Flow Status
	0 = Not Flowing 1 = Flowing
Base + 50	Hourly Flow Rate
Base + 51	Daily Flow Rate
Base + 52	Hourly Energy Rate
Base + 53	Daily Energy Rate
Base + 54	Totalized Volume (Rollover @ 1,000,000)
Base + 55	Current Day Volume
Base + 56	Previous Day Volume
Base + 57	Totalized Energy (Rollover @ 1,000,000)
Base + 58	Current Day Energy
Base + 59	Previous Day Energy
Base + 60	Flow Time This Period
Base + 61	Current Day Flow Time
Base + 62	Previous Day Flow Time
Base + 63	Square Root Extension
Base + 64	Calculation Specific FP Output Parameter #1 DP Flow Calculation Method
	0 = AGA 2530-1992 = Beta 1 = AGA 3-1985 = C Prime 2 = GOST = Beta 3 = V-Cone = Beta 4 = Slotted Orifice = Cd
Base + 65	Calculation Specific FP Output Parameter #2 DP Flow Calculation Method
	0 = AGA 2530-1992 = Ftf 1 = AGA 3-1985 = Beta 2 = GOST = Dynamic Viscosity 3 = V-Cone = Ftf 4 = Slotted Orifice = Red
Base + 66	Calculation Specific FP Output Parameter #3 DP Flow Calculation Method
	0 = AGA 2530-1992 = Ftb 1 = AGA 3-1985 = Ftf 2 = GOST = E 3 = V-Cone = Fpf 4 = Slotted Orifice = Fp

Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 67	Calculation Specific FP Output Parameter #4 DP Flow Calculation Method
	0 = AGA 2530-1992 = Fpb 1 = AGA 3-1985 = Ftb 2 = GOST = e 3 = V-Cone = Rho 4 = Slotted Orifice = Ft
Base + 68	Calculation Specific FP Output Parameter #5 DP Flow Calculation Method
	0 = AGA 2530-1992 = Fgr 1 = AGA 3-1985 = Fpb 2 = GOST = d 3 = V-Cone = Fgr 4 = Slotted Orifice = Standard Density
Base + 69	Calculation Specific FP Output Parameter #6 DP Flow Calculation Method
	0 = AGA 2530-1992 = Fn 1 = AGA 3-1985 = Fgr 2 = GOST = D 3 = V-Cone = Y 4 = Slotted Orifice = Flowing Density
Base + 70	Calculation Specific FP Output Parameter #7 DP Flow Calculation Method
	0 = AGA 2530-1992 = Fsl 1 = AGA 3-1985 = Fr 2 = GOST = Kp 3 = V-Cone = Fa 4 = Slotted Orifice = N/A
Base + 71	Calculation Specific FP Output Parameter #8 DP Flow Calculation Method
	0 = AGA 2530-1992 = Fc 1 = AGA 3-1985 = E 2 = GOST = Ksh 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 72	Calculation Specific FP Output Parameter #9 DP Flow Calculation Method
	0 = AGA 2530-1992 = Red 1 = AGA 3-1985 = Y 2 = GOST = Ksfh 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 73	Calculation Specific FP Output Parameter #10 DP Flow Calculation Method

Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description
	0 = AGA 2530-1992 = Y1 1 = AGA 3-1985 = Fb 2 = GOST = Cinf 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 74	Calculation Specific FP Output Parameter #11 DP Flow Calculation Method
	0 = AGA 2530-1992 = N/A 1 = AGA 3-1985 = Fa 2 = GOST = Kre 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 75	Calculation Specific FP Output Parameter #12 DP Flow Calculation Method
	0 = AGA 2530-1992 = N/A 1 = AGA 3-1985 = N/A 2 = GOST = Re 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 76	Calculation Specific Discrete Output Parameter #13 DP Flow Calculation Method
	0 = AGA 2530-1992 = N/A 1 = AGA 3-1985 = N/A 2 = GOST = Press Ratio 3 = V-Cone = N/A 4 = Slotted Orifice = N/A 8 = NIST 14 = Liquid (1) or Gas (0) Mode
Base + 77	Calculation Specific Discrete Output Parameter #14 DP Flow Calculation Method
	0 = AGA 2530-1992 = N/A 1 = AGA 3-1985 = N/A 2 = GOST = Rsh Over D 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 78	Calculation Specific Discrete Output Parameter #15 DP Flow Calculation Method
	0 = AGA 2530-1992 = N/A 1 = AGA 3-1985 = N/A 2 = GOST = Keinf 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 79	Calculation Specific Discrete Output Parameter #16 DP Flow Calculation Method
	0 = AGA 2530-1992 = N/A

Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description
	1 = AGA 3-1985 = N/A 2 = GOST = N/A 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 80	Calculation Specific Byte Output Parameter #17 DP Flow Calculation Method
	0 = AGA 2530-1992 = N/A 1 = AGA 3-1985 = N/A 2 = GOST = N/A 3 = V-Cone = N/A 4 = Slotted Orifice = N/A
Base + 81	Calculation Specific Byte Output Parameter #18
Base + 82	Calculation Specific Byte Output Parameter #19
Base + 83	Calculation Specific Byte Output Parameter #20
Base + 84	Fpv Supercompressibility Factor
Base + 85	Zb Factor
Base + 86	Zf Factor
Base + 87	Zs Factor
Base + 88	Fwl Factor Calculation Enable
	0 = Fwl Disabled 1 = Fwl Enabled
Base + 89	Fwl Latitude (Degrees)
Base + 90	Fwl Height (Feet)
Base + 91	Fwl Factor
Base + 92	Fpwl Static Pressure Correction Calculation Enable
	0 = Fpwl Disabled 1 = Fpwl Enabled
Base + 93	Fpwl Differential Pressure Correction Calculation Enable
	0 = Fpwl Disabled 1 = Fpwl Enabled
Base + 94	Fpwl G1 (Ft/Sec/Sec)
Base + 95	Fpwl Go (Ft/Sec/Sec)
Base + 96	Fpwl Factor
Base + 97	Full Well Stream Correction Factor Enable
	0 = Full Well Stream Disabled 1 = Full Well Stream Enabled
Base + 98	Full Well Stream Correction Factor
Base + 99	Fwv Water Content Factor Enable
	0 = Fwv Disabled 1 = Fwv Enabled
Base + 100	Fwv Water Content Correction Mode

Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description	
	0 = Manual Mode 1 = Partial Calculation 2 = Full Calculation	
Base + 101	Fwv Water Content	
Base + 102	Fwv Correction Factor	
Base + 103	Contract Hour	
Base + 104	Break Periodic Log Upon Audit	
	0 = Don't Break Log 1 = Break Log	
Base + 105	Modbus Audit Register Number Offset	
Base + 106	Periodic Data Historical Data Block Index	
Base + 107	Periodic Data Historical Time Period	
	0 = No Log 1 = 1 Minute 2 = 2 Minutes 3 = 3 Minutes 4 = 4 Minutes 5 = 5 Minutes 6 = 6 Minutes 7 = 10 Minutes 8 = 15 Minutes 9 = 20 Minutes 10 = 30 Minutes 11 = 1 Hour 12 = 2 Hours 13 = 3 Hours	14 = 4 Hours 15 = 6 Hours 16 = 12 Hours 17 = Daily 18 = Continuous 19 = 1 Second 20 = 2 Seconds 21 = 3 Seconds 22 = 4 Seconds 23 = 5 Seconds 24 = 6 Seconds 25 = 10 Seconds 26 = 15 Seconds 27 = 30 Seconds
Base + 108	Daily Data Historical Data Block Index	
Base + 109	Audit/Alarm Log Data Block Index	
Base + 110	Historical Averaging Technique	
	0 = Flow-Dependent Time-Weighted Linear Average 1 = Flow-Dependent Time-Weighted Formulaic Average 2 = Flow-Weighted Linear Average 3 = Flow-Weighted Formulaic Average 4 = Time Weighted Linear Average 5 = Linear Average	
Base + 111	Current Hour Volume	
Base + 112	Previous Hour Volume	
Base + 113	Current Hour Energy	
Base + 114	Previous Hour Energy	
Base + 115	Current Month Volume	
Base + 116	Previous Month Volume	
Base + 117	Current Month Energy	

Table 38: Differential Pressure Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 118	Previous Month Energy
Base + 119	Minimum Differential Pressure (in. H2O) for Accurate Measurement
Base + 120	Maximum Differential Pressure (in. H2O) for Accurate Measurement
Base + 121	Min/Max Accurate Flow Alarm Timeout (Seconds)
Base + 122	Minimum Accurate Flow Alarm Note: Minimum Accurate Flow Alarm only detected when Flow Status = Flowing.
	0 = OK 1 = Low Flow Alarm
Base + 123	Maximum Accurate Flow Alarm
	0 = OK 1 = High Flow Alarm
Base + 124	Calculated Minimum Accurate Flow Rate (MCF/H)
Base + 125	Calculated Maximum Accurate Flow Rate (MCF/H)
Base + 126	Calculated Minimum Accurate Energy Rate (MMBTU/H)
Base + 127	Calculated Maximum Accurate Energy Rate (MMBTU/H)
Base + 128	DP Flow Calculation Descriptor Text 1 – Text Table Index 1
Base + 129	Energy (Heating Value) Calculation Enable
Base + 130	Energy Calculation Method
Base + 131	Heating Value Select
	0 = Live 1 = Calculated Value
Base + 132	Heating Value In Use
Base + 133	Gas Quality BTU Value
Base + 134	Gross Calc Heating Value (Dry)
Base + 135	Compressibility Factor
Base + 136	Energy Deviation Percentage
Base + 137	Energy Deviation Limit
Base + 138	Energy Deviation Alarm Status
Base + 139	Default On Deviation Alarm
	0 = Live 1 = Calculated Value
Base + 140	Previous Day Date
Base + 141	Previous Day Time
Base + 142	Previous Day Hour
Base + 143	Previous Day Minute
Base + 144	Previous Day DP
Base + 145	Previous Day Press
Base + 146	Previous Day Temp
Base + 147	Previous Day Sqrt

Register Number	Data Description
Base + 148	Previous Day Gravity
Base + 149	Previous Day BTU
Base + 150	Previous Day CO2
Base + 151	Previous Day N2
Base + 152	Previous Hour Date
Base + 153	Previous Hour Time
Base + 154	Previous Hour Hour
Base + 155	Previous Hour Minute
Base + 156	Previous Hour DP
Base + 157	Previous Hour Press
Base + 158	Previous Hour Temp
Base + 159	Previous Hour Sqrt
Base + 160	Previous Hour Gravity
Base + 161	Previous Hour Flow Time
Base + 162	Previous Hour BTU
Base + 163	Previous Hour CO2
Base + 164	Previous Hour N2
Base + 165	DP Cutoff Delay
Base + 166	Net Calc Heating Value (Wet)
Base + 167	Heating Value Select (0=Dry Calc Method; 1-Wet Calc Method)
Base + 168	Alarm Log Data Block Index

2.18. Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	AGA7 Flow Calculation Enable
Base + 1	AGA7 Flow Calculation Descriptor Text – Text Table Index
Base + 2	AGA7 Flow Calculation ID
Base + 3	AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust 2 = AGA 11 Coriolis 3 = Gross Liquid
Base + 4	Fpv Calculation Method
	0 = NX-19 1 = NX-19 Analysis 2 = AGA8 Short 3 = AGA8 Gross 4 = AGA8 Detail 5 = GERG91 Mod 6 = Constant 1.0

Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description
	7 = NX19Mod
Base + 5	Pipe Diameter (For Gas Velocity Calculation)
Base + 6	K Meter Factor (If Not Using K Meter Factor Table)
Base + 7	K Meter Factor Table Enable
	0 = Don't Use K Factor Table 1 = Use K Factor Table
Base + 8	K Meter Factor Engineering Units
Base + 9	K Factor #1 Frequency (Hz)
Base + 10	K Factor #1 Meter Factor
Base + 11	K Factor #2 Frequency (Hz)
Base + 12	K Factor #2 Meter Factor
Base + 13	K Factor #3 Frequency (Hz)
Base + 14	K Factor #3 Meter Factor
Base + 15	K Factor #4 Frequency (Hz)
Base + 16	K Factor #4 Meter Factor
Base + 17	K Factor #5 Frequency (Hz)
Base + 18	K Factor #5 Meter Factor
Base + 19	K Factor #6 Frequency (Hz)
Base + 20	K Factor #6 Meter Factor
Base + 21	K Factor #7 Frequency (Hz)
Base + 22	K Factor #7 Meter Factor
Base + 23	K Factor #8 Frequency (Hz)
Base + 24	K Factor #8 Meter Factor
Base + 25	K Factor #9 Frequency (Hz)
Base + 26	K Factor #9 Meter Factor
Base + 27	K Factor #10 Frequency (Hz)
Base + 28	K Factor #10 Meter Factor
Base + 29	M Correction Factor
Base + 30	Atmospheric Pressure
Base + 31	Pressure Base
Base + 32	Temperature Base
Base + 33	Calculation Specific FP Configuration Parameter #1 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = Sensor Pulse Count 2 = AGA 11 Coriolis = Flow Pressure Effect
Base + 34	Calculation Specific FP Configuration Parameter #2 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic

Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description
	1 = AGA 7 AutoAdjust = Km Factor 2 = AGA 11 Coriolis = Calibration Static Pressure
Base + 35	Calculation Specific FP Configuration Parameter #3 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = Ks Factor
Base + 36	Calculation Specific FP Configuration Parameter #4 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = K Factor
Base + 37	Calculation Specific FP Configuration Parameter #5 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = A Bar Factor
Base + 38	Calculation Specific FP Configuration Parameter #6 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = Delta A High Alarm Limit
Base + 39	Calculation Specific FP Configuration Parameter #7 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = Delta A Lo Alarm Limit
Base + 40	Calculation Specific FP Configuration Parameter #8 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = Delta A Hi Warn Limit
Base + 41	Calculation Specific FP Configuration Parameter #9 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = Delta A Low Warn Limit
Base + 42	Calculation Specific FP Configuration Parameter #10 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = AA Meter Failure
Base + 43	Calculation Specific FP Configuration Parameter #11 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic 1 = AGA 7 AutoAdjust = Use Unadjusted Calc 0 = Don't Use 1 = Use
Base + 44	Calculation Specific FP Configuration Parameter #12
Base + 45	Calculation Specific Discrete Configuration Parameter #13

Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 46	Calculation Specific Discrete Configuration Parameter #14
Base + 47	Break Log upon Gas Quality Change
	0 = No Log Break 1 = Break Log
Base + 48	Log Gas Quality Audits
	0 = Don't Log GQ Audits 1 = Log GQ Audits
Base + 49	Calculation Specific Byte Configuration Parameter #17
Base + 50	Calculation Specific Byte Configuration Parameter #18
Base + 51	Calculation Specific Byte Configuration Parameter #19
Base + 52	Calculation Specific Byte Configuration Parameter #20
Base + 53	Accumulator Pulse Count
Base + 54	Data Valid Alarm Input
	0 = Data Valid 1 = Data Invalid
Base + 55	Pulse Frequency (For Low Frequency Cutoff)
Base + 56	Flow Rate Filter Time (Seconds)
Base + 57	Low Flow Cutoff Time (Seconds)
Base + 58	Low Frequency Cutoff (Hz)
Base + 59	Manual Flow Cutoff
	0 = Normal Flow Measurement 1 = Forced Flow Cutoff
Base + 60	Static Pressure
Base + 61	Static Pressure Gauge/Absolute
Base + 62	Gas Temperature
Base + 63	Gas Quality Data Definition Block Index
Base + 64	Pipe Diameter Engineering Units
Base + 65	Atmospheric Pressure Engineering Units
Base + 66	Static Pressure Engineering Units
Base + 67	Temperature Engineering Units
Base + 68	Volume Engineering Units
Base + 69	Flow Rate Engineering Units
Base + 70	Uncorrected (Actual) Flow Rate Engineering Units
Base + 71	Energy Engineering Units
Base + 72	Energy Rate Engineering Units
Base + 73	Flow Status
	0 = Not Flowing 1 = Flowing
Base + 74	Hourly Actual Flow Rate

Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 75	Daily Actual Flow Rate
Base + 76	Hourly Corrected Flow Rate
Base + 77	Daily Corrected Flow Rate
Base + 78	Hourly Energy Rate
Base + 79	Daily Energy Rate
Base + 80	Totalized Actual Volume (Rollover @ 1,000,000)
Base + 81	Current Day Actual Volume
Base + 82	Previous Day Actual Volume
Base + 83	Totalized Volume (Rollover @ 1,000,000)
Base + 84	Current Day Corrected Volume
Base + 85	Previous Day Corrected Volume
Base + 86	Totalized Energy (Rollover @ 1,000,000)
Base + 87	Current Day Energy
Base + 88	Previous Day Energy
Base + 89	Flow Time This Period
Base + 90	Current Day Flow Time
Base + 91	Previous Day Flow Time
Base + 92	Calculation Specific FP Output Parameter #1 AGA 7 Calculation Method
	0 = AGA 7 Turbine/PD/Ultrasonic = Meter Factor In Use 1 = AGA 7 AutoAdjust = Delta A Deviation
Base + 93	Calculation Specific FP Output Parameter #2
Base + 94	Calculation Specific FP Output Parameter #3
Base + 95	Calculation Specific FP Output Parameter #4
Base + 96	Calculation Specific FP Output Parameter #5
Base + 97	Calculation Specific FP Output Parameter #6
Base + 98	Calculation Specific FP Output Parameter #7
Base + 99	Calculation Specific FP Output Parameter #8
Base + 100	Calculation Specific FP Output Parameter #9
Base + 101	Calculation Specific FP Output Parameter #10
Base + 102	Calculation Specific FP Output Parameter #11
Base + 103	Calculation Specific FP Output Parameter #12
Base + 104	Calculation Specific Discrete Output Parameter #13 AGA 7 Calculation Method
	1 = AGA 7 AutoAdjust 0 = OK 1 = Alarm
Base + 105	Calculation Specific Discrete Output Parameter #14 AGA 7 Calculation Method

Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description
	1 = AGA 7 AutoAdjust 0 = OK 1 = Alarm
Base + 106	Calculation Specific Discrete Output Parameter #15
Base + 107	Calculation Specific Discrete Output Parameter #16
Base + 108	Calculation Specific Byte Output Parameter #17 AGA 7 Calculation Method
	1 = AGA 7 AutoAdjust
	0 = Normal 1 = ABN Warning 2 = ABN Alarm 3 = NSF Warning 4 = NSF Alarm 5 = No Flow 6 = Leakage 7 = No Main Pls 8 = No Sensor Pls
Base + 109	Calculation Specific Byte Output Parameter #18 AGA 7 Calculation Method
	1 = AGA 7 AutoAdjust
	0 = Normal 1 = Low Warning 2 = Low Alarm 3 = High Warning 4 = High Alarm
Base + 110	Calculation Specific Byte Output Parameter #19
Base + 111	Calculation Specific Byte Output Parameter #20
Base + 112	Fpv Supercompressibility Factor
Base + 113	Zb Factor
Base + 114	Zf Factor AGA 7 Calculation Method
	2 = AGA 11 Coriolis = Calculated Density
Base + 115	Zs Factor
Base + 116	Fpwl Static Pressure Correction Calculation Enable
	0 = Fpwl Disabled 1 = Fpwl Enabled
Base + 117	Fpwl G1 (Ft/Sec/Sec)
Base + 118	Fpwl Go (Ft/Sec/Sec)
Base + 119	Fpwl Factor
Base + 120	Full Well Stream Correction Factor Enable
	0 = Full Well Stream Disabled

Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description	
	1 = Full Well Stream Enabled	
Base + 121	Full Well Stream Correction Factor	
Base + 122	Fwv Water Content Factor Enable	
	0 = Fwv Disabled 1 = Fwv Enabled	
Base + 123	Fwv Water Content Correction Mode	
	0 = Manual Mode 1 = Partial Calculation 2 = Full Calculation	
Base + 124	Fwv Water Content	
Base + 125	Fwv Correction Factor	
Base + 126	Contract Hour	
Base + 127	Break Periodic Log Upon Audit	
	0 = Don't Break Log 1 = Break Log	
Base + 128	Modbus Audit Register Number Offset	
Base + 129	Periodic Data Historical Data Block Index	
Base + 130	Periodic Data Historical Time Period	
	0 = No Log 1 = 1 Minute 2 = 2 Minutes 3 = 3 Minutes 4 = 4 Minutes 5 = 5 Minutes 6 = 6 Minutes 7 = 10 Minutes 8 = 15 Minutes 9 = 20 Minutes 10 = 30 Minutes 11 = 1 Hour 12 = 2 Hours 13 = 3 Hours	14 = 4 Hours 15 = 6 Hours 16 = 12 Hours 17 = Daily 18 = Continuous 19 = 1 Second 20 = 2 Seconds 21 = 3 Seconds 22 = 4 Seconds 23 = 5 Seconds 24 = 6 Seconds 25 = 10 Seconds 26 = 15 Seconds 27 = 30 Seconds
Base + 131	Daily Data Historical Data Block Index	
Base + 132	Audit/Alarm Log Data Block Index	
Base + 133	Historical Averaging Technique	
	0 = Flow-Dependent Time-Weighted Linear Average 1 = Flow-Dependent Time-Weighted Formulaic Average 2 = Flow-Weighted Linear Average 3 = Flow-Weighted Formulaic Average 4 = Time Weighted Linear Average 5 = Linear Average	
Base + 134	Current Hour Actual Volume	

Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 135	Previous Hour Actual Volume
Base + 136	Current Hour Corrected Volume
Base + 137	Previous Hour Corrected Volume
Base + 138	Current Hour Energy
Base + 139	Previous Hour Energy
Base + 140	Current Month Actual Volume
Base + 141	Previous Month Actual Volume
Base + 142	Current Month Corrected Volume
Base + 143	Previous Month Corrected Volume
Base + 144	Current Month Energy
Base + 145	Previous Month Energy
Base + 146	Minimum Actual Flow Rate (MACF/H) For Accurate Measurement
Base + 147	Maximum Actual Flow Rate (MACF/H) for Accurate Measurement
Base + 148	Min/Max Accurate Flow Alarm Timeout (Seconds)
Base + 149	Minimum Accurate Flow Alarm Note: Minimum Accurate Flow Alarm only detected when Flow Status = Flowing.
	0 = OK 1 = Low Flow Alarm
Base + 150	Maximum Accurate Flow Alarm
	0 = OK 1 = High Flow Alarm
Base + 151	Calculated Minimum Accurate Flow Rate (MCF/H)
Base + 152	Calculated Maximum Accurate Flow Rate (MCF/H)
Base + 153	Calculated Minimum Accurate Energy Rate (MMBTU/H)
Base + 154	Calculated Maximum Accurate Energy Rate (MMBTU/H)
Base + 155	AGA7 Flow Calculation Descriptor Text 1 – Text Table Index 1
Base + 156	Energy (Heating Value) Calculation Enable
Base + 157	Energy Calculation Method
Base + 158	Heating Value Select
	0 = Live 1 = Calculated Value
Base + 159	Heating Value In Use
Base + 160	Gas Quality BTU Value
Base + 161	Gross Calc Heating Value (Dry)
Base + 162	Compressibility Factor
Base + 163	Energy Deviation Percentage
Base + 164	Energy Deviation Limit
Base + 165	Energy Deviation Alarm Status
Base + 166	Default On Deviation Alarm

Table 39: Turbine Flow Calculation Modbus Register Assignments

Register Number	Data Description
	0 = Live 1 = Calculated Value
Base + 167	Previous Day Date
Base + 168	Previous Day Time
Base + 169	Previous Day Hour
Base + 170	Previous Day Minute
Base + 171	Previous Day Pulse
Base + 172	Previous Day Press
Base + 173	Previous Day Temp
Base + 174	Previous Day Gravity
Base + 175	Previous Day BTU
Base + 176	Previous Day CO2
Base + 177	Previous Day N2
Base + 178	Previous Hour Date
Base + 179	Previous Hour Time
Base + 180	Previous Hour Hour
Base + 181	Previous Hour Minute
Base + 182	Previous Hour Pulse
Base + 183	Previous Hour Press
Base + 184	Previous Hour Temp
Base + 185	Previous Hour Gravity
Base + 186	Previous Hour Flow Time
Base + 187	Previous Hour BTU
Base + 188	Previous Hour CO2
Base + 189	Previous Hour N2
Base + 190	Mass Eng Units (0-Lbs ; 1-Kgm)
Base + 191	Mass Rate Eng Units (0-lbs/ : 1-Kgm/)
Base + 192	Hourly Act Mass Rate
Base + 193	Daily Act Mass Rate
Base + 194	Hourly Corr Mass Rate
Base + 195	Daily Corr Mass Rate
Base + 196	Total Act Mass
Base + 197	Curr Daily Act Mass
Base + 198	Prev Daily Act Mass
Base + 199	Total Mass
Base + 200	Curr Day Corr Mass
Base + 201	Prev Day Corr Mass
Base + 203	Curr Hour Act Mass
Base + 204	Prev Hour Act Mass

Register Number	Data Description
Base + 205	Cur Hour Corr Mass
Base + 206	Prev Hour Corr Mass
Base + 207	Curr Month Act Mass
Base + 208	Prev Month Act Mass
Base + 209	Curr Month Corr Mass
Base + 210	Prev Month Corr Mass
Base + 211	Net Calc Heating Value (Wet)
Base + 212	Heating Value Select (0=Dry Calc Method; 1-Wet Calc Method)
Base + 213	Alarm Log Data Block Index

2.19. Table 40: Speed of Sound Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	AGA 10 Speed of Sound Calculation ID
Base + 1	AGA 10 Speed of Sound Calculation Enable
Base + 2	Atmospheric Pressure
Base + 3	Pressure Base
Base + 4	Temperature Base
Base + 5	Static Pressure
Base + 6	Static Pressure Gauge/Absolute
	0 = Gauge Pressure 1 = Absolute Pressure
Base + 7	Gas Temperature
Base + 8	Atmospheric Pressure Engineering Units
Base + 9	Pressure Engineering Units
Base + 10	Temperature Engineering Units
Base + 11	Gas Quality Block Index
Base + 12	Calculated Speed Of Sound
Base + 13	Speed of Sound Engineering Units
Base + 14	Supercompressibility
Base + 15	Reference Speed of Sound
Base + 16	Speed of Sound Deviation Limit (%)
Base + 17	Speed of Sound Deviation Alarm
	0 = No Alarm 1 = In Alarm
Base + 18	Reference Path #1 Speed of Sound
Base + 19	Reference Path #2 Speed of Sound
Base + 20	Reference Path #3 Speed of Sound

Register Number	Data Description
Base + 21	Reference Path #4 Speed of Sound
Base + 22	Reference Path #5 Speed of Sound
Base + 23	Reference Path #6 Speed of Sound
Base + 24	Reference Path #7 Speed of Sound
Base + 25	Reference Path #8 Speed of Sound
Base + 26	Path Speed Of Sound Deviation Limit (EU)
Base + 27	Path Speed of Sound Deviation Alarm
	0 = No Alarm 1 = In Alarm

2.20. Table 41: Meter Station Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	Meter Station Calculation ID
Base + 1	Meter Station Calculation Enable
Base + 2	Meter Station Flow Status
	0 = No Flow 1 = Flowing
Base + 3	Meter Station Hourly Flow Rate
Base + 4	Meter Station Daily Flow Rate
Base + 5	Meter Station Hourly Energy Rate
Base + 6	Meter Station Daily Energy Rate
Base + 7	Meter Station Totalized Volume
Base + 8	Meter Station Totalized Energy
Base + 9	Meter Station Current Day Volume
Base + 10	Meter Station Previous Day Volume
Base + 11	Meter Station Current Day Energy
Base + 12	Meter Station Previous Day Energy
Base + 13	Meter Station Contract Hour
Base + 14	Meter Station Current Hour Volume
Base + 15	Meter Station Previous Hour Volume
Base + 16	Meter Station Current Hour Energy
Base + 17	Meter Station Previous Hour Energy
Base + 18	Meter Station Current Month Volume
Base + 19	Meter Station Previous Month Volume
Base + 20	Meter Station Current Month Energy
Base + 21	Meter Station Previous Month Energy
Base + 22	Meter Station Minimum Available Flow Rate
Base + 23	Meter Station Maximum Available Flow Rate
Base + 24	Meter Station Minimum Available Energy Rate

Register Number	Data Description
Base + 25	Meter Station Maximum Available Energy Rate

2.21. Table 42: Meter Run Switching Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	Calculation ID
Base + 1	Meter Run Switching Calculation Enable
Base + 2	Meter Run #1 Process Value
Base + 3	Meter Run #1 Open Limit
Base + 4	Meter Run #1 Close Limit
Base + 5	Meter Run #1 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 6	Meter Run #1 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 7	Meter Run #2 Process Value
Base + 8	Meter Run #2 Open Limit
Base + 9	Meter Run #2 Close Limit
Base + 10	Meter Run #2 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 11	Meter Run #2 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 12	Meter Run #3 Process Value
Base + 13	Meter Run #3 Open Limit
Base + 14	Meter Run #3 Close Limit
Base + 15	Meter Run #3 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 16	Meter Run #3 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 17	Meter Run #4 Process Value
Base + 18	Meter Run #4 Open Limit
Base + 19	Meter Run #4 Close Limit
Base + 20	Meter Run #4 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 21	Meter Run #4 Current Valve Status

Table 42: Meter Run Switching Calculation Modbus Register Assignments

Register Number	Data Description
	0 = Valve Closed 1 = Valve Opened
Base + 22	Meter Run #5 Process Value
Base + 23	Meter Run #5 Open Limit
Base + 24	Meter Run #5 Close Limit
Base + 25	Meter Run #5 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 26	Meter Run #5 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 27	Meter Run #6 Process Value
Base + 28	Meter Run #6 Open Limit
Base + 29	Meter Run #6 Close Limit
Base + 30	Meter Run #6 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 31	Meter Run #6 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 32	Meter Run #7 Process Value
Base + 33	Meter Run #7 Open Limit
Base + 34	Meter Run #7 Close Limit
Base + 35	Meter Run #7 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 36	Meter Run #7 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 37	Meter Run #8 Process Value
Base + 38	Meter Run #8 Open Limit
Base + 39	Meter Run #8 Close Limit
Base + 40	Meter Run #8 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 41	Meter Run #8 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 42	Meter Run #9 Process Value
Base + 43	Meter Run #9 Open Limit

Table 42: Meter Run Switching Calculation Modbus Register Assignments

Register Number	Data Description
Base + 44	Meter Run #9 Close Limit
Base + 45	Meter Run #9 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 46	Meter Run #9 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 47	Meter Run #10 Process Value
Base + 48	Meter Run #10 Open Limit
Base + 49	Meter Run #10 Close Limit
Base + 50	Meter Run #10 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 51	Meter Run #10 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 52	Meter Run #11 Process Value
Base + 53	Meter Run #11 Open Limit
Base + 54	Meter Run #11 Close Limit
Base + 55	Meter Run #11 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 56	Meter Run #11 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 57	Meter Run #12 Process Value
Base + 58	Meter Run #12 Open Limit
Base + 59	Meter Run #12 Close Limit
Base + 60	Meter Run #12 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 61	Meter Run #12 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 62	Meter Run #13 Process Value
Base + 63	Meter Run #13 Open Limit
Base + 64	Meter Run #13 Close Limit
Base + 65	Meter Run #13 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled

Table 42: Meter Run Switching Calculation Modbus Register Assignments

Register Number	Data Description
Base + 66	Meter Run #13 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 67	Meter Run #14 Process Value
Base + 68	Meter Run #14 Open Limit
Base + 69	Meter Run #14 Close Limit
Base + 70	Meter Run #14 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 71	Meter Run #14 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 72	Meter Run #15 Process Value
Base + 73	Meter Run #15 Open Limit
Base + 74	Meter Run #15 Close Limit
Base + 75	Meter Run #15 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 76	Meter Run #15 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 77	Meter Run #16 Process Value
Base + 78	Meter Run #16 Open Limit
Base + 79	Meter Run #16 Close Limit
Base + 80	Meter Run #16 Valve Fail Status
	0 = Valve OK/Enabled 1 = Valve Failed/Disabled
Base + 81	Meter Run #16 Current Valve Status
	0 = Valve Closed 1 = Valve Opened
Base + 82	Current Control Status
	Action – Low Nibble (Bits 0–3) 0 = Monitoring 1 = Opening (with Run Priority Index) 2 = Closing (with Run Priority Index) 3 = Settling 4 = Hard Opening (with Run Priority Index) 5 = Hard Closing (with Run Priority Index) 6 = Timing Down To Open a Meter 7 = Timing Down To Close a Meter Meter – High Nibble (Bits 4–7)

Register Number	Data Description
	0–15 = Run Priority Index 1–16
Base + 83	Current Action Countdown Timer
Base + 84	Insufficient Capacity to Close
	0 = OK 1 = Insufficient Remaining Capacity to Close a Meter

2.22. Table 43: Historical Average Calculation Modbus Register Assignments

Register Number	Data Description	
Base + 0	Historical Average Calculation ID	
Base + 1	Historical Average Calculation Enable	
Base + 2	Periodic Data Historical Data Block Index	
Base + 3	Record Time Period – Byte Point Reference	
	0 = No Automatic Log Break 1 = 1 Minute 2 = 2 Minutes 3 = 3 Minutes 4 = 4 Minutes 5 = 5 Minutes 6 = 6 Minutes 7 = 10 Minutes 8 = 15 Minutes	9 = 20 Minutes 10 = 30 Minutes 11 = 1 Hour 12 = 2 Hours 13 = 3 Hours 14 = 4 Hours 15 = 6 Hours 16 = 12 Hours 17 = Daily
Base + 4	Force Log Break	
	0 = Not Action 1 = Force Log Break (Reset After Action)	
Base + 5	Daily Log Contract Hour	
Base + 6	Delta Time	
Base + 7	Flow Dependency Factor (For Flow Dependent Time Weighted Averages)	
	0 = Not Flowing 1 = Flowing	
Base + 8	Flow Weighting Factor (For Flow Weighted Averages)	
Base + 9	Flow Weighting Factor Power (For Flow Weighted Averages)	
Base + 10	Historical Average Item #1 Current Value	
Base + 11	Historical Average Item #1 Current Period Average	
Base + 12	Historical Average Item #1 Previous Period Average	
Base + 13	Historical Average Item #2 Current Value	
Base + 14	Historical Average Item #2 Current Period Average	
Base + 15	Historical Average Item #2 Previous Period Average	
Base + 16	Historical Average Item #3 Current Value	
Base + 17	Historical Average Item #3 Current Period Average	

Table 43: Historical Average Calculation Modbus Register Assignments

Register Number	Data Description
Base + 18	Historical Average Item #3 Previous Period Average
Base + 19	Historical Average Item #4 Current Value
Base + 20	Historical Average Item #4 Current Period Average
Base + 21	Historical Average Item #4 Previous Period Average
Base + 22	Historical Average Item #5 Current Value
Base + 23	Historical Average Item #5 Current Period Average
Base + 24	Historical Average Item #5 Previous Period Average
Base + 25	Historical Average Item #6 Current Value
Base + 26	Historical Average Item #6 Current Period Average
Base + 27	Historical Average Item #6 Previous Period Average
Base + 28	Historical Average Item #7 Current Value
Base + 29	Historical Average Item #7 Current Period Average
Base + 30	Historical Average Item #7 Previous Period Average
Base + 31	Historical Average Item #8 Current Value
Base + 32	Historical Average Item #8 Current Period Average
Base + 33	Historical Average Item #8 Previous Period Average
Base + 34	Historical Average Item #9 Current Value
Base + 35	Historical Average Item #9 Current Period Average
Base + 36	Historical Average Item #9 Previous Period Average
Base + 37	Historical Average Item #10 Current Value
Base + 38	Historical Average Item #10 Current Period Average
Base + 39	Historical Average Item #10 Previous Period Average
Base + 40	Historical Average Item #11 Current Value
Base + 41	Historical Average Item #11 Current Period Average
Base + 42	Historical Average Item #11 Previous Period Average
Base + 43	Historical Average Item #12 Current Value
Base + 44	Historical Average Item #12 Current Period Average
Base + 45	Historical Average Item #12 Previous Period Average
Base + 46	Historical Average Item #13 Current Value
Base + 47	Historical Average Item #13 Current Period Average
Base + 48	Historical Average Item #13 Previous Period Average
Base + 49	Historical Average Item #14 Current Value
Base + 50	Historical Average Item #14 Current Period Average
Base + 51	Historical Average Item #14 Previous Period Average
Base + 52	Historical Average Item #15 Current Value
Base + 53	Historical Average Item #15 Current Period Average
Base + 54	Historical Average Item #15 Previous Period Average
Base + 55	Historical Average Item #16 Current Value

Table 43: Historical Average Calculation Modbus Register Assignments

Register Number	Data Description
Base + 56	Historical Average Item #16 Current Period Average
Base + 57	Historical Average Item #16 Previous Period Average
Base + 58	Historical Average Item #17 Current Value
Base + 59	Historical Average Item #17 Current Period Average
Base + 60	Historical Average Item #17 Previous Period Average
Base + 61	Historical Average Item #18 Current Value
Base + 62	Historical Average Item #18 Current Period Average
Base + 63	Historical Average Item #18 Previous Period Average
Base + 64	Historical Average Item #19 Current Value
Base + 65	Historical Average Item #19 Current Period Average
Base + 66	Historical Average Item #19 Previous Period Average
Base + 67	Historical Average Item #20 Current Value
Base + 68	Historical Average Item #20 Current Period Average
Base + 69	Historical Average Item #20 Previous Period Average
Base + 70	Historical Average Item #21 Current Value
Base + 71	Historical Average Item #21 Current Period Average
Base + 72	Historical Average Item #21 Previous Period Average
Base + 73	Event Logger Trigger
Base + 74	Post Event Lo Count
Base + 75	Event Capture
Base + 76	Post Event Logs
Base + 77	Event Date
Base + 78	Event Time

2.23. Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description	
Base + 0	Liquid Turbine Flow Calculation Enable	
Base + 1	Liquid Turbine Flow Calculation Descriptor Text	
Base + 2	Liquid Turbine Flow Calculation ID	
Base + 3	Turbine Pickup	
	0 = Single 1 = Dual	
Base + 4	Dual Pulse Checking	
	0 = Level A 1 = Level B	
Base + 5	API Table Used	
	0 = Table 23/24 A 1 = Table 23/24 B 2 = Table 24 C 3 = Old 23/24 Table 4 = Table 23/24 E 5 = Table 53/54 A	6 = Table 53/54 B 7 = Table 54 C 8 = Old 53/54 Table 9 = Propylene(CH 11.3.3) 10 = Ethylene(API 2565) 11 = Ethylene(NBS 1045)
Base + 6	Atmospheric Pressure	
Base + 7	Meter K Factor	
Base + 8	Meter Number	
Base + 9	Meter Active Threshold Hz	
Base + 10	Pulse Deviation Threshold	
Base + 11	Error Counts Limit	
Base + 12	API/SG Unit Selection	
	0 = SG 1 = API	
Base + 13	Reference Density	
Base + 14	Linear Factor Table Enable	
	0 = No 1 = Yes	
Base + 15	Meter Factor	
Base + 16	Linear Factor #1 Frequency (Hz)	
Base + 17	Linear Factor #1 Meter Factor	
Base + 18	Linear Factor #2 Frequency (Hz)	
Base + 19	Linear Factor #2 Meter Factor	
Base + 20	Linear Factor #3 Frequency (Hz)	
Base + 21	Linear Factor #3 Meter Factor	
Base + 22	Linear Factor #4 Frequency (Hz)	
Base + 23	Linear Factor #4 Meter Factor	
Base + 24	Linear Factor #5 Frequency (Hz)	

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 25	Linear Factor #5 Meter Factor
Base + 26	Linear Factor #6 Frequency (Hz)
Base + 27	Linear Factor #6 Meter Factor
Base + 28	Linear Factor #7 Frequency (Hz)
Base + 29	Linear Factor #7 Meter Factor
Base + 30	Linear Factor #8 Frequency (Hz)
Base + 31	Linear Factor #8 Meter Factor
Base + 32	Linear Factor #9 Frequency (Hz)
Base + 33	Linear Factor #9 Meter Factor
Base + 34	Linear Factor #10 Frequency (Hz)
Base + 35	Linear Factor #10 Meter Factor
Base + 36	Atmospheric Pressure Engineering Units
Base + 37	Pressure Engineering Units
Base + 38	Temperature Engineering Units
Base + 39	Gross Engineering Units
	0 = BBL/HR 1 = GAL/HR
Base + 40	Net Engineering Units
	0 = BBL/HR 1 = GAL/HR
Base + 41	Mass Engineering Units
	0 = LB/HR 1 = KLB/HR 2 = KG/HR
Base + 42	Flowrate Engineering Units
	0 = Hourly 1= Daily
Base + 43	K Factor Engineering Units
	0 = Pulse/BBL 2 = Pulse/M3
Base + 44	Density Engineering Units
	0 = GM/CC 1 = LB/BBL 2 = LB/CF 3 = KG/M3
Base + 45	Current Product Index
Base + 46	Density Temperature Selection
	0 = Density 1 = Meter
Base + 47	Density Pressure Selection

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
	0 = Density 1 = Meter
Base + 48	ASTM 1250 selection
	0 = 1250-80 1 = 1250-04
Base + 49	Flow Type
	0 = Turbine 1 = Orifice
Base + 50	Density Type
	0 = None 1 = 4-20mA 2 = Density Calc#1 3 = Density Calc#2 4 = Density Calc#3 5 = Density Calc# 4
Base + 51	Alpha T
Base + 52	Include HYC Factor
	0 = No 1 = Yes
Base + 53	Density Input Select
	0 = SG 1 = API 2 = Density
Base + 54	Digital Out Batch Preset
Base + 55	Digital In Request Print
Base + 56	Prover Gravity Override
Base + 57	Inst. Gross Flowrate
Base + 58	Inst. Net Flowrate
Base + 59	Inst. Mass Flowrate
Base + 60	Pressure
Base + 61	Temperature
Base + 62	BS&W Percent
Base + 63	Specific Gravity
Base + 64	Density
Base + 65	SG@60F
Base + 66	VCF
Base + 67	CPL
Base + 68	Density Temperature
Base + 69	Density Pressure
Base + 70	CTPL

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 71	FWA CTPL
Base + 72	Batch Gross Total
Base + 73	Batch Net Total
Base + 74	Batch Mass Total
Base + 75	Opening Gross Total
Base + 76	Opening Net Total
Base + 77	Opening Mass Total
Base + 78	Daily Gross Total
Base + 79	Daily Net Total
Base + 80	Daily Mass Total
Base + 81	Cumm. Gross Total(Rollover @ 1,000,000)
Base + 82	Cumm. Net Total(Rollover @ 1,000,000)
Base + 83	Cumm. Mass Total(Rollover @ 1,000,000)
Base + 84	FWA Pressure
Base + 85	FWA Temperature
Base + 86	FWA SG
Base + 87	FWA Density
Base + 88	FWA SG@60F
Base + 89	FWA VCF
Base + 90	FWA CPL
Base + 91	Equilibrium Pressure
Base + 92	F Factor
Base + 93	A Factor
Base + 94	B Factor
Base + 95	Last Batch FWA Meter Factor
Base + 96	Meter Cumm Pulse
Base + 97	Error Cumm Pulse
Base + 98	Last Batch API Table Used
Base + 99	Last Batch ASTM 1250 selection
	0 = 1250-80 1 = 1250-04
Base + 100	Gravity Override
Base + 101	Day Start Hour
Base + 102	Orifice Calc Method
	0 = AGA 3-1985 1 = API14.3-1992
Base + 103	Ticket Gravity Override
Base + 104	FWA/Ticket BS&W Percent
Base + 105	Recalculate Batch

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 106	Meter Pulse
Base + 107	Error Pulse
Base + 108	Frequency
Base + 109	Reference Temperature Correction
Base + 110	Linear Factor
Base + 111	Batch Type
	0 = Manual 1 = Daily Batch 2 = Preset Volume Batch
Base + 112	Batch Volume Selection
	0 = Gross 1 = Net 2 = Mass
Base + 113	Preset Volume Batch
Base + 114	Batch Start Date
Base + 115	Batch Start Time
Base + 116	Batch End Date
Base + 117	Batch End Time
Base + 118	Batch Number
Base + 119	Batch Product Index
Base + 120	Batch Product Name
Base + 121	Batch API Table Used
Base + 122	Next Product Index To Be Used
Base + 123	Batch Preset
Base + 124	Batch Preset Warning
Base + 125	Next Batch Preset
Base + 126	Next Batch Preset Warning
Base + 127	End Batch
	0 = No 1 = Yes
Base + 128	Digital In End Batch
Base + 129	Change to Product Index
Base + 130	Acceptable SG Limit
Base + 131	Acceptable Flowrate Limit
Base + 132	SG Retrack Time Period in Minutes
Base + 133	Flowrate Retrack Time Period in minutes
Base + 134	Last Batch Start Date
Base + 135	Last Batch Start Time
Base + 136	Last Batch End Date

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description	
Base + 137	Last Batch End Time	
Base + 138	Last Batch Number	
Base + 139	Last Batch Product Number	
Base + 140	Last Batch K Factor	
Base + 141	Last Batch Meter Factor	
Base + 142	Last Batch Product Name	
Base + 143	Last Batch Gross Total	
Base + 144	Last Batch Net Total	
Base + 145	Last Batch Mass Total	
Base + 146	Last Batch Opening Gross Total	
Base + 147	Last Batch Opening Net Total	
Base + 148	Last Batch Opening Mass Total	
Base + 149	Last Batch Closing Gross Total	
Base + 150	Last Batch Closing Net Total	
Base + 151	Last Batch Closing Mass Total	
Base + 152	Last Batch FWA Pressure	
Base + 153	Last Batch FWA Temperature	
Base + 154	Last Batch FWA SG	
Base + 155	Last Batch FWA Density	
Base + 156	Last Batch FWA SG@60F	
Base + 157	Last Batch FWA VCF	
Base + 158	Last Batch FWA CPL	
Base + 159	Ticket Gross Standard Volume	
Base + 160	Ticket Net Standard Volume	
Base + 161	Ticket BS&W Factor	
Base + 162	Batch End Data Historical Data Block Index	
Base + 163	Prover Run Historical Data Block Index	
Base + 164	Prover Results Historical Data Block Index	
Base + 165	Periodic Data Historical Data Block Index	
Base + 166	Periodic Data Historical Time Period	
	0 = No Log 1 = 1 Minute 2 = 2 Minutes 3 = 3 Minutes 4 = 4 Minutes 5 = 5 Minutes 6 = 6 Minutes 7 = 10 Minutes 8 = 15 Minutes	9 = 20 Minutes 10 = 30 Minutes 11 = 1 Hour 12 = 2 Hours 13 = 3 Hours 14 = 4 Hours 15 = 6 Hours 16 = 12 Hours
Base + 167	Daily Data Historical Data Block Index	

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 168	Audit/Alarm Log Data Block Index
Base + 169	Flow Status
	0 = No Flow 1 = Flow Detected
Base + 170	Prover Date
Base + 171	Prover Time
Base + 172	Prover Meter Number
Base + 173	Prover Product Name
Base + 174	Prover Product Index
Base + 175	Select Y Factor
	0 = No 1 = Yes
Base + 176	Last Batch FWA CTPL
Base + 177	TDVOL (Elapsed time for piston to travel between switches
Base + 178	TFMP (Elapsed time to count whole pulses)
Base + 179	Automatic Meter Factor
Base + 180	Gross Totalizer Last Prover
Base + 181	Temperature at Previous Meter Factor
Base + 182	Pressure at Previous Meter Factor
Base + 183	Density at Previous Meter Factor
Base + 184	Gross Flowrate at Previous Meter Factor
Base + 185	Meter Factor at Previous Meter Factor
Base + 186	Master Avg Pulses
Base + 187	Avg Prover Pressure
Base + 188	Avg Prover Temperature
Base + 189	Correction Meter Volume
Base + 190	Run #1 Run Number
Base + 191	Run #1 Pass #1 Pulses
Base + 192	Run #1 Pass #2 Pulses
Base + 193	Run #1 Interpolated Pulses
Base + 194	Run #1 TEMP
Base + 195	Run #1 TDVOL
Base + 196	Run #1 Gross Flowrate
Base + 197	Run #1 Meter Temperature
Base + 198	Run #1 Meter Pressure
Base + 199	Run #1 Prover Temperature
Base + 200	Run #1 Prover Pressure
Base + 201	Run #1 Density
Base + 202	Run #2 Run Number

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 203	Run #2 Pass #1 Pulses
Base + 204	Run #2 Pass #2 Pulses
Base + 205	Run #2 Interpolated Pulses
Base + 206	Run #2 TEMP
Base + 207	Run #2 TDVOL
Base + 208	Run #2 Gross Flowrate
Base + 209	Run #2 Meter Temperature
Base + 210	Run #2 Meter Pressure
Base + 211	Run #2 Prover Temperature
Base + 212	Run #2 Prover Pressure
Base + 213	Run #2 Density
Base + 214	Run #3 Run Number
Base + 215	Run #3 Pass #1 Pulses
Base + 216	Run #3 Pass #2 Pulses
Base + 217	Run #3 Interpolated Pulses
Base + 218	Run #3 TEMP
Base + 219	Run #3 TDVOL
Base + 220	Run #3 Gross Flowrate
Base + 221	Run #3 Meter Temperature
Base + 222	Run #3 Meter Pressure
Base + 223	Run #3 Prover Temperature
Base + 224	Run #3 Prover Pressure
Base + 225	Run #3 Density
Base + 226	Run #4 Run Number
Base + 227	Run #4 Pass #1 Pulses
Base + 228	Run #4 Pass #2 Pulses
Base + 229	Run #4 Interpolated Pulses
Base + 230	Run #4 TEMP
Base + 231	Run #4 TDVOL
Base + 232	Run #4 Gross Flowrate
Base + 233	Run #4 Meter Temperature
Base + 234	Run #4 Meter Pressure
Base + 235	Run #4 Prover Temperature
Base + 236	Run #4 Prover Pressure
Base + 237	Run #4 Density
Base + 238	Run #5 Run Number
Base + 239	Run #5 Pass #1 Pulses
Base + 240	Run #5 Pass #2 Pulses

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 241	Run #5 Interpolated Pulses
Base + 242	Run #5 TEMP
Base + 243	Run #5 TDVOL
Base + 244	Run #5 Gross Flowrate
Base + 245	Run #5 Meter Temperature
Base + 246	Run #5 Meter Pressure
Base + 247	Run #5 Prover Temperature
Base + 248	Run #5 Prover Pressure
Base + 249	Run #5 Density
Base + 250	Run #6 Run Number
Base + 251	Run #6 Pass #1 Pulses
Base + 252	Run #6 Pass #2 Pulses
Base + 253	Run #6 Interpolated Pulses
Base + 254	Run #6 TEMP
Base + 255	Run #6 TDVOL
Base + 256	Run #6 Gross Flowrate
Base + 257	Run #6 Meter Temperature
Base + 258	Run #6 Meter Pressure
Base + 259	Run #6 Prover Temperature
Base + 260	Run #6 Prover Pressure
Base + 261	Run #6 Density
Base + 262	Run #7 Run Number
Base + 263	Run #7 Pass #1 Pulses
Base + 264	Run #7 Pass #2 Pulses
Base + 265	Run #7 Interpolated Pulses
Base + 266	Run #7 TEMP
Base + 267	Run #7 TDVOL
Base + 268	Run #7 Gross Flowrate
Base + 269	Run #7 Meter Temperature
Base + 270	Run #7 Meter Pressure
Base + 271	Run #7 Prover Temperature
Base + 272	Run #7 Prover Pressure
Base + 273	Run #7 Density
Base + 274	Run #8 Run Number
Base + 275	Run #8 Pass #1 Pulses
Base + 276	Run #8 Pass #2 Pulses
Base + 277	Run #8 Interpolated Pulses
Base + 278	Run #8 TEMP

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 279	Run #8 TDVOL
Base + 280	Run #8 Gross Flowrate
Base + 281	Run #8 Meter Temperature
Base + 282	Run #8 Meter Pressure
Base + 283	Run #8 Prover Temperature
Base + 284	Run #8 Prover Pressure
Base + 285	Run #8 Density
Base + 286	Run #9 Run Number
Base + 287	Run #9 Pass #1 Pulses
Base + 288	Run #9 Pass #2 Pulses
Base + 289	Run #9 Interpolated Pulses
Base + 290	Run #9 TEMP
Base + 291	Run #9 TDVOL
Base + 292	Run #9 Gross Flowrate
Base + 293	Run #9 Meter Temperature
Base + 294	Run #9 Meter Pressure
Base + 295	Run #9 Prover Temperature
Base + 296	Run #9 Prover Pressure
Base + 297	Run #9 Density
Base + 298	Run #10 Run Number
Base + 299	Run #10 Pass #1 Pulses
Base + 300	Run #10 Pass #2 Pulses
Base + 301	Run #10 Interpolated Pulses
Base + 302	Run #10 TEMP
Base + 303	Run #10 TDVOL
Base + 304	Run #10 Gross Flowrate
Base + 305	Run #10 Meter Temperature
Base + 306	Run #10 Meter Pressure
Base + 307	Run #10 Prover Temperature
Base + 308	Run #10 Prover Pressure
Base + 309	Run #10 Density
Base + 310	Prover Volume
Base + 311	Prover Temperature Correction CTSP
Base + 312	Prover Pressure Correction CPSP
Base + 313	Correction Factor CTLP
Base + 314	Correction Factor CPLP
Base + 315	Correction Prover Volume
Base + 316	Total Average Pulses

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 317	Total Interpolated Pulses
Base + 318	K Factor
Base + 319	Gross Meter Volume
Base + 320	Correction Factor CTLM
Base + 321	Correction Factor CPLM
Base + 322	Prove Meter Factor
Base + 323	Digital Out Batch Warning
Base + 324	Digital Out Batch Ended
Base + 325	Spare
Base + 326	Modbus Audit Base Register Number
Base + 327	FWA Meter Factor
Base + 328	FWA BS&W Percent
Base + 329	Avg Meter Pressure
Base + 330	Avg Meter Temperature
Base + 331	Pipe Diameter
Base + 332	Orifice Diameter
Base + 333	Dp Zero Offset
Base + 334	Orifice Thermal Coeff
Base + 335	Pipe Thermal Coeff
Base + 336	Pipe Temp
Base + 337	Orifice Temp
Base + 338	Viscosity
Base + 339	Heat Ratio
Base + 340	DP
Base + 341	FWA DP
Base + 342	Viscosity Engineering Units
Base + 343	Pipe Engineering Units
Base + 344	DP Engineering Units
Base + 345	Tap Config
Base + 346	Tap Location
Base + 347	Y
Base + 348	E
Base + 349	A
Base + 350	B
Base + 351	FA
Base + 352	K
Base + 353	CD
Base + 354	FMP

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 355	FIP
Base + 356	EV
Base + 357	Last Batch FWA DP
Base + 358	DP Selection
	0 = Single 1 = Dual 2 = Triple
Base + 359	Low DP
Base + 360	Mid DP
Base + 361	High DP
Base + 362	Mid DP Switch
Base + 363	High DP Switch
Base + 364	Last Periodic Temperature
Base + 365	Last Periodic Pressure
Base + 366	Last Periodic DP
Base + 367	Last Periodic SG
Base + 368	Last Periodic Density
Base + 369	Prove Avg Density
Base + 370	Last Prover Date
Base + 371	Last Prover Time
Base + 372	Monthly Gross Total
Base + 373	Monthly Net Total
Base + 374	Monthly Mass Total
Base + 375	Density Correction Factor
Base + 376	Monthly Start Day
Base + 377	Company Name1
Base + 378	Company Name2
Base + 379	Uncorrected Density
Base + 380	Last Monthly Gross Total
Base + 381	Last Monthly Net Total
Base + 382	Last Monthly Mass Total
Base + 383	FWA Density Correction Factor
Base + 384	Last Batch Density Correction Factor
Base + 385	Print Periodic Report
Base + 386	Print Daily Report
Base + 387	Print Batch Report
Base + 388	Print Monthly Report
Base + 389	Digital Out Channel A Fail
Base + 390	Digital Out Channel B Fail

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 391	Digital Out Channel AB Fail
Base + 392	Digital Out Channel A Missing Pulse
Base + 393	Digital Out Channel A Added Pulse
Base + 394	Digital Out Channel B Missing Pulse
Base + 395	Digital Out Channel B Added Pulse
Base + 396	Previous Hourly Gross Total
Base + 397	Previous Hourly Net Total
Base + 398	Previous Hourly Mass Total
Base + 399	Hourly Gross Total
Base + 400	Hourly Net Total
Base + 401	Hourly Mass Total
Base + 402	Previous Daily Gross Total
Base + 403	Previous Daily Net Total
Base + 404	Previous Daily Mass Total
Base + 405	Stack Batch #1 Product ID
Base + 406	Stack Batch #1 Volume Selection
Base + 407	Stack Batch #1 Next Batch Preset
Base + 408	Stack Batch #1 Next Batch Preset Warning
Base + 409	Stack Batch #2 Product ID
Base + 410	Stack Batch #2 Volume Selection
Base + 411	Stack Batch #2 Next Batch Preset
Base + 412	Stack Batch #2 Next Batch Preset Warning
Base + 413	Stack Batch #3 Product ID
Base + 414	Stack Batch #3 Volume Selection
Base + 415	Stack Batch #3 Next Batch Preset
Base + 416	Stack Batch #3 Next Batch Preset Warning
Base + 417	Stack Batch #4 Product ID
Base + 418	Stack Batch #4 Volume Selection
Base + 419	Stack Batch #4 Next Batch Preset
Base + 420	Stack Batch #4 Next Batch Preset Warning
Base + 421	Stack Batch #5 Product ID
Base + 422	Stack Batch #5 Volume Selection
Base + 423	Stack Batch #5 Next Batch Preset
Base + 424	Stack Batch #5 Next Batch Preset Warning
Base + 425	Stack Batch #6 Product ID
Base + 426	Stack Batch #6 Volume Selection
Base + 427	Stack Batch #6 Next Batch Preset
Base + 428	Stack Batch #6 Next Batch Preset Warning

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 429	Stack Batch #7 Product ID
Base + 430	Stack Batch #7 Volume Selection
Base + 431	Stack Batch #7 Next Batch Preset
Base + 432	Stack Batch #7 Next Batch Preset Warning
Base + 433	Stack Batch #8 Product ID
Base + 434	Stack Batch #8 Volume Selection
Base + 435	Stack Batch #8 Next Batch Preset
Base + 436	Stack Batch #8 Next Batch Preset Warning
Base + 437	Stack Batch #9 Product ID
Base + 438	Stack Batch #9 Volume Selection
Base + 439	Stack Batch #9 Next Batch Preset
Base + 440	Stack Batch #9 Next Batch Preset Warning
Base + 441	Stack Batch #10 Product ID
Base + 442	Stack Batch #10 Volume Selection
Base + 443	Stack Batch #10 Next Batch Preset
Base + 444	Stack Batch #10 Next Batch Preset Warning
Base + 445	Stack Batch #11 Product ID
Base + 446	Stack Batch #11 Volume Selection
Base + 447	Stack Batch #11 Next Batch Preset
Base + 448	Stack Batch #11 Next Batch Preset Warning
Base + 449	Stack Batch #12 Product ID
Base + 450	Stack Batch #12 Volume Selection
Base + 451	Stack Batch #12 Next Batch Preset
Base + 452	Stack Batch #12 Next Batch Preset Warning
Base + 453	Stack Batch #13 Product ID
Base + 454	Stack Batch #13 Volume Selection
Base + 455	Stack Batch #13 Next Batch Preset
Base + 456	Stack Batch #13 Next Batch Preset Warning
Base + 457	Stack Batch #14 Product ID
Base + 458	Stack Batch #14 Volume Selection
Base + 459	Stack Batch #14 Next Batch Preset
Base + 460	Stack Batch #14 Next Batch Preset Warning
Base + 461	Stack Batch #15 Product ID
Base + 462	Stack Batch #15 Volume Selection
Base + 463	Stack Batch #15 Next Batch Preset
Base + 464	Stack Batch #15 Next Batch Preset Warning
Base + 465	Stack Batch #16 Product ID
Base + 466	Stack Batch #16 Volume Selection

Table 51: Liquid Flow Calculation Modbus Register Assignments

Register Number	Data Description
Base + 467	Stack Batch #16 Next Batch Preset
Base + 468	Stack Batch #16 Next Batch Preset Warning
Base + 469	API
Base + 470	FWA API
Base + 471	Retrieve Batch
	1 = Get Last Batch 2 = Batch Number
Base + 472	Spare
Base + 473	Batch Number to Retrieve
Base + 474	Spare
Base + 475	Dual Pulse Simultaneous counts
Base + 476	Spare
Base + 477	Historical Averaging Technique
	0 = Flow-Dependent Time-Weighted Linear Average 1 = Flow-Dependent Time-Weighted Formulaic Average 2 = Flow-Weighted Linear Average 3 = Flow-Weighted Formulaic Average 4 = Time Weighted Linear Average 5 = Linear Average
Base + 478	Last Batch FWA BS&W(Water Cut) Percent
Base + 479	VCF/CPL Decimal position
Base + 480	CTPL Decimal Position
Base + 481	Density@15C
Base + 482	FWA Density@15C
Base + 483	Last Batch FWA Density@15C
Base + 484	Error Frequency
Base + 485	Prove Run Repeatability
Base + 486	Audit Log Data Block Index

2.24. Table 53: Liquid Prover Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	Prover Processing Enable
Base + 1	Prover Processing Descriptor Text – Text Table Index
Base + 2	Prover Processing ID
Base + 3	Prover Type
	0 = Compact (Small Volume) 1 = Pipe Prover 2 = Master Prover
Base + 4	Uni or Bi directional Prover
	0 = Uni 1 = Bi
Base + 5	Prover Density Override
Base + 6	Single Prover
	0 = No 1 = Yes
Base + 7	Enter Prover Index
Base + 8	Ambient Temperature
Base + 9	Thermal Coeff. Invar Rod
Base + 10	Thermal Coeff. Of Prover
Base + 11	Base Temperature
Base + 12	Base Pressure
Base + 13	Piston Upstream Signal Polarity
	0 = Low 1 = High
Base + 14	Run Output Signal Maintained
	0 = Off 1 = On
Base + 15	Number of Proving Runs to Average (1-6)
Base + 16	Number of Total Proving Runs
Base + 17	% Pre-Travel of Volume
Base + 18	Prover Abort Timeout in Seconds
Base + 19	Prover Volume
Base + 20	Prover Diameter
Base + 21	Prover Wall Thickness
Base + 22	Modulus of Elasticity
Base + 23	Coeff. Of Cubic Expansion
Base + 24	Allow Prover Temperature Change Period in Seconds
Base + 25	Allow Prover Temperature Change(Deg)
Base + 26	Prover and Meter Temperature Deviation(Deg)

Table 53: Liquid Prover Calculation Modbus Register Assignments

Register Number	Data Description
Base + 27	Pulse Deviation Percent
Base + 28	Meter Factor Final Deviation %
Base + 29	Use Meter Temperature
	0 = No 1 = Yes
Base + 30	Use Meter Pressure
	0 = No 1 = Yes
Base + 31	Automatic Implement of Prover Meter Factor
	0 = No 1 = Yes
Base + 32	Prover Diameter Engineering Units
Base + 33	Prover Volume Engineering Units
Base + 34	Prover Temperature Engineering Units
Base + 35	Digital In Prover Ready
Base + 36	Digital Out Launch Ball Forward
Base + 37	Digital Out Launch Ball Reverse
Base + 38	Digital Out Launch Ball
Base + 39	Digital Out Prover Meter
Base + 40	Digital Out Abort
Base + 41	Digital Out Prover Complete
Base + 42	Digital Out Compact Prover Running
Base + 43	Digital Out Prover In Progress
Base + 44	Prover State
Base + 45	Prover Status
Base + 46	Master Meter K Factor
Base + 47	Single Run Forward Pulse
Base + 48	Single Run Total Pulse
Base + 49	Single Run Interpolated Pulse
Base + 50	Single Run Tfmp
Base + 51	Single Run Tdvol
Base + 52	Single Run FWA Meter Temperature
Base + 53	Single Run FWA Meter Pressure
Base + 54	Single Run FWA Prove Temperature
Base + 55	Single Run FWA Prove Pressure
Base + 56	Single Run FWA SG60
Base + 57	Single Run FWA Flowrate
Base + 58	Single Run Meter Number
Base + 59	Prover Index

Register Number	Data Description
Base + 60	Prover Pulse In
Base + 61	Run Number
Base + 62	Number of Good Runs
Base + 63	Prover Pulse
Base + 64	Prover Index for AutoCONFIG
Base + 65	Prover Temperature
Base + 66	Prover Pressure
Base + 67	Master Accum Pulse
Base + 68	Prover Volume Type
	0 = Gross 1 = Mass
Base + 69	Modbus Audit Base Register Number
Base + 70	Table-53 Print Last Prover Report
Base + 71	Reserved
Base + 72	Reserved
Base + 73	Reserved

2.25. Table 56: Liquid Density Modbus Register Assignments

Register Number	Data Description
Base + 0	Density Calculation Enable
Base + 1	Density Calculation Descriptor Text – Text Table Index
Base + 2	Density Calculation ID
Base + 3	Density Constants K0 – Sarasota UGC Solartron
Base + 4	Density Constants K1 – Sarasota UGC Solartron
Base + 5	Density Constants K2 – Sarasota UGC Solartron
Base + 6	Density Constants K3 – Sarasota UGC Solartron
Base + 7	Density Constants K4 – Sarasota UGC Solartron
Base + 8	Density Constants K5 – Sarasota UGC Solartron
Base + 9	Density Constants K6 – Sarasota UGC Solartron
Base + 10	Density Constants K7 – Sarasota UGC Solartron
Base + 11	Density Constants K8 – Sarasota UGC Solartron
Base + 12	Density Constants K9 – Sarasota UGC Solartron
Base + 13	Density Constants K10 – Sarasota UGC Solartron
Base + 14	Density Correction Factor
Base + 15	Density Period
Base + 16	Calculated Density
Base + 17	Density Type
	0 = Sarasota 1 = UGC

Register Number	Data Description
	2 = Solartron
Base + 18	Density Temperature
Base + 19	Density Pressure
Base + 20	Audit/Alarm Log Data Block Index
Base + 21	Modbus Audit Base Reg Number
Base + 22	Density Frequency
Base + 23	Reference Temperature

2.26. Table 57: Station Control Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	Station Control Disable On Download
	0 = Control Disabled (Output Value is Tracked) 1 = Control Enabled
Base + 1	Automatic/Manual Control Mode
	0 = Manual Override Mode (Use Manual PID Output) 1 = Automatic Mode
Base + 2	Number of Meter Protection Loops
Base + 3	Meter Protection #1 Process Variable
Base + 4	Meter Protection #1 PID Setpoint
Base + 5	Meter Protection #1 PID Failure Status
	0 = Normal 1 = Failed
Base + 6	Meter Protection #2 Process Variable
Base + 7	Meter Protection #2 PID Setpoint
Base + 8	Meter Protection #2 PID Failure Status
	0 = Normal 1 = Failed
Base + 9	Meter Protection #3 Process Variable
Base + 10	Meter Protection #3 PID Setpoint
Base + 11	Meter Protection #3 PID Failure Status
	0 = Normal 1 = Failed
Base + 12	Meter Protection #4 Process Variable
Base + 13	Meter Protection #4 PID Setpoint
Base + 14	Meter Protection #4 PID Failure Status
	0 = Normal 1 = Failed
Base + 15	Meter Protection #5 Process Variable
Base + 16	Meter Protection #5 PID Setpoint

Table 57: Station Control Calculation Modbus Register Assignments

Register Number	Data Description
Base + 17	Meter Protection #5 PID Failure Status
	0 = Normal 1 = Failed
Base + 18	Meter Protection #6 Process Variable
Base + 19	Meter Protection #6 PID Setpoint
Base + 20	Meter Protection #6 PID Failure Status
	0 = Normal 1 = Failed
Base + 21	Meter Protection #7 Process Variable
Base + 22	Meter Protection #7 PID Setpoint
Base + 23	Meter Protection #7 PID Failure Status
	0 = Normal 1 = Failed
Base + 24	Meter Protection #8 Process Variable
Base + 25	Meter Protection #8 PID Setpoint
Base + 26	Meter Protection #8 PID Failure Status
	0 = Normal 1 = Failed
Base + 27	Meter Protection #9 Process Variable
Base + 28	Meter Protection #9 PID Setpoint
Base + 29	Meter Protection #9 PID Failure Status
	0 = Normal 1 = Failed
Base + 30	Meter Protection #10 Process Variable
Base + 31	Meter Protection #10 PID Setpoint
Base + 32	Meter Protection #10 PID Failure Status
	0 = Normal 1 = Failed
Base + 33	Meter Protection #11 Process Variable
Base + 34	Meter Protection #11 PID Setpoint
Base + 35	Meter Protection #11 PID Failure Status
	0 = Normal 1 = Failed
Base + 36	Meter Protection #12 Process Variable
Base + 37	Meter Protection #12 PID Setpoint
Base + 38	Meter Protection #12 PID Failure Status
	0 = Normal 1 = Failed
Base + 39	Inlet Pressure Override PID Enable/Disable
	0 = Disabled

Table 57: Station Control Calculation Modbus Register Assignments

Register Number	Data Description
	1 = Enabled
Base + 40	Inlet Pressure Override PID Process Variable
Base + 41	Inlet Pressure Override PID Failure Status
Base + 42	Low Inlet Pressure Override PID Local Setpoint
Base + 43	Low Inlet Pressure Override PID Remote Setpoint
Base + 44	Low Inlet Pressure Override PID Remote Setpoint Load
Base + 45	Low Inlet Pressure Override PID Minimum Setpoint
Base + 46	Low Inlet Pressure Override PID Maximum Setpoint
Base + 47	Low Inlet Pressure Override PID Operating Setpoint
Base + 48	Low Inlet Pressure Override PID Local/Remote
Base + 49	High Outlet Pressure Override PID Enable/Disable
	0 = Disabled 1 = Enabled
Base + 50	High Outlet Pressure Override PID Process Variable
Base + 51	High Outlet Pressure Override PID Setpoint
Base + 52	High Outlet Pressure Override PID Failure Status
Base + 53	Low Outlet Pressure Override PID Enable/Disable
	0 = Disabled 1 = Enabled
Base + 54	Low Outlet Pressure Override PID Process Variable
Base + 55	Low Outlet Pressure Override PID Failure Status
Base + 56	Low Outlet Pressure Override PID Local Setpoint
Base + 57	Low Outlet Pressure Override PID Remote Setpoint
Base + 58	Low Outlet Pressure Override PID Remote Setpoint Load
Base + 59	Low Outlet Pressure Override PID Minimum Setpoint
Base + 60	Low Outlet Pressure Override PID Maximum Setpoint
Base + 61	Low Outlet Pressure Override PID Operating Setpoint
Base + 62	Low Outlet Pressure Override PID Local/Remote
Base + 63	Spare High Override PID Enable/Disable
	0 = Disabled 1 = Enabled
Base + 64	Spare High Override PID Process Variable
Base + 65	Spare High Override PID Setpoint
Base + 66	Spare High Override PID Failure Status
Base + 67	High Safety Override PID Enable/Disable
	0 = Disabled 1 = Enabled
Base + 68	High Safety Override PID Process Variable
Base + 69	High Safety Override PID Setpoint

Table 57: Station Control Calculation Modbus Register Assignments

Register Number	Data Description	
Base + 70	High Safety Override PID Failure Status	
Base + 71	Flow/Energy PID Enable/Disable	
	0 = Disabled 1 = Enabled	
Base + 72	Flow/Energy PID Process Variable	
Base + 73	Flow/Energy PID Fail Status	
Base + 74	Flow/Energy PID Local Setpoint	
Base + 75	Flow/Energy PID Remote Setpoint	
Base + 76	Flow/Energy PID Remote Setpoint Load	
Base + 77	Flow/Energy PID Minimum Setpoint	
Base + 78	Flow/Energy PID Maximum Setpoint	
Base + 79	Flow/Energy PID Operating Setpoint	
Base + 80	Flow/Energy PID Control Mode	
	0 = Local 1 = Remote	
Base + 81	Pressure Control PID Enable/Disable	
	0 = Disabled 1 = Enabled	
Base + 82	Pressure Control PID Process Variable	
Base + 83	Pressure Control PID Fail Status	
Base + 84	Pressure Control PID Local Setpoint	
Base + 85	Pressure Control PID Remote Setpoint	
Base + 86	Pressure Control PID Remote Setpoint Load	
Base + 87	Pressure Control PID Minimum Setpoint	
Base + 88	Pressure Control PID Maximum Setpoint	
Base + 89	Pressure Control PID Operating Setpoint	
Base + 90	Pressure Control PID Control Mode	
	0 = Local 1 = Remote	
Base + 91	Maximum Output Change	
Base + 92	Station Control Action	
	0 = Forward (Full Open at 20 mA) 1 = Reverse (Full Open at 4 mA)	
Base + 93	Station Control Output Value	
Base + 94	Controlling PID Identity	
	0 = Not Controlling 1 = Meter Protection #1 2 = Meter Protection #2 3 = Meter Protection #3 4 = Meter Protection #4	11 = Meter Protection #11 12 = Meter Protection #12 13 = Inlet Pressure Override 14 = High Outlet Pressure Override 15 = Low Outlet Pressure Override

Table 57: Station Control Calculation Modbus Register Assignments

Register Number	Data Description	
	5 = Meter Protection #5 6 = Meter Protection #6 7 = Meter Protection #7 8 = Meter Protection #8 9 = Meter Protection #9 10 = Meter Protection #10	16 = High Override 17 = High Safety Override 18 = Manual Override 19 = Flow/Energy 20 = Pressure Control
Base + 95	Station Shut-In Command Discrete Reset After Command Processed.	
	0 = Idle 1 = Shut-In (Station Control Set to Manual. Manual PID Setpoint set to 0.0.)	
Base + 96	Valve Staging	
	0 = Valve Staging Disabled 1 = Valve Staging Enabled – Use Valve Staging Inputs	
Base + 97	Valve #1 Output	
Base + 98	Valve #2 Output	
Base + 99	Valve #3 Output	
Base + 100	Valve #4 Output	
Base + 101	Valve #1 Open Status	
Base + 102	Valve #1 Close Status	
Base + 103	Valve #2 Open Status	
Base + 104	Valve #2 Close Status	
Base + 105	Valve #3 Open Status	
Base + 106	Valve #3 Close Status	
Base + 107	Valve #4 Open Status	
Base + 108	Valve #4 Close Status	
Base + 109	Manual Override Setpoint	

2.27. Table 60: Sampler/Accumulator Modbus Register Assignments

Register Number	Data Description
Base + 0	Sampler/Accumulator Calculation ID
Base + 1	Sampler/Accumulator Calculation Enable
Base + 2	Sampler/Accumulator Mode Select
Base + 3	Sampler/Accumulator Scale Factor
Base + 4	Sampler/Accumulator Input #1
Base + 5	Sampler/Accumulator Input #2
Base + 6	Sampler/Accumulator Input #3
Base + 7	Sampler/Accumulator Input #4
Base + 8	Sampler/Accumulator Input #5
Base + 9	Sampler/Accumulator Input #6
Base + 10	Sampler/Accumulator Input #7
Base + 11	Sampler/Accumulator Input #8
Base + 12	Sampler/Accumulator Input #9
Base + 13	Sampler/Accumulator Input #10
Base + 14	Sampler/Accumulator Input #11
Base + 15	Sampler/Accumulator Input #12
Base + 16	Sampler/Accumulator Input #13
Base + 17	Sampler/Accumulator Input #14
Base + 18	Sampler/Accumulator Input #15
Base + 19	Sampler/Accumulator Input #16
Base + 20	Sampler/Accumulator Total Accumulator
Base + 21	Sampler/Accumulator Sampler Output Enable
Base + 22	Sampler/Accumulator Setpoint
Base + 23	Sampler/Accumulator Pulse Discrete Output

2.28. Table 61: Scheduled Copy Modbus Register Assignments

Register Number	Data Description
Base + 0	Scheduled Copy Calculation ID
Base + 1	Scheduled Copy Calculation Enable
Base + 2	Scheduled Copy Mode Select
Base + 3	Scheduled Copy Scale Factor
Base + 4	Scheduled Copy Input #1
Base + 5	Scheduled Copy Input #2
Base + 6	Scheduled Copy Input #3

2.29. Table 62: Nomination Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	Nomination Calculation ID
Base + 1	Nomination Calculation Enable
	0 = Disabled 1 = Enabled
Base + 2	Nomination Start Mode Select
	0 = Manual (Forced) Start Only 1 = Every Hour 2 = Every Day At Specified Hour 3 = At Date/Time (one time)
Base + 3	Manual Nomination Start Command
	0 = Idle 1 = Start Nomination
Base + 4	Nomination Start Hour
Base + 5	Nomination Start Date
Base + 6	Nomination Time
Base + 7	Next Nomination PID Setpoint
Base + 8	Next Nomination Accumulation Setpoint
Base + 9	PID Setpoint Destination
Base + 10	Nomination Accumulation Monitoring
	0 = Monitoring Disabled 1 = Monitoring Enabled
Base + 11	Nomination Accumulation Setpoint
Base + 12	Accumulation Input
Base + 13	Period Accumulation
Base + 14	Disable On Download

2.30. Table 63: Remote Control Valve Modbus Register Assignments

Register Number	Data Description
Base + 0	Remote Control Valve Calculation ID
Base + 1	Remote Control Valve Enable
	0 = Disabled 1 = Enabled
Base + 2	Remote/Local Control Mode
	0 = Local Control 1 = Remote Control
Base + 3	Local Control Always Enabled
	0 = Local Control Based Upon Remote/Local Control Mode 1 = Local Mode Always Enabled
Base + 4	Valve Command Timeout Value
Base + 5	Remote Single Command Mode
	0 = Both Remote Arm and Execute Commands Required 1 = Only Remote Execute Command Required
Base + 6	Local Single Command Mode
	0 = Both Local Arm and Execute Commands Required 1 = Only Local Execute Command Required
Base + 7	Remote Arm Close Command
	0 = Idle 1 = Arm Close
Base + 8	Remote Arm Open Command
	0 = Idle 1 = Arm Open
Base + 9	Local Arm Close Command
	0 = Idle 1 = Arm Close
Base + 10	Local Arm Open Command
	0 = Idle 1 = Arm Open
Base + 11	Remote Execute Close Command
	0 = Idle 1 = Execute Close
Base + 12	Remote Execute Open Command
	0 = Idle 1 = Execute Open
Base + 13	Local Execute Close Command
	0 = Idle 1 = Execute Close
Base + 14	Local Execute Open Command
	0 = Idle 1 = Execute Open

Table 63: Remote Control Valve Modbus Register Assignments

Register Number	Data Description
Base + 15	Arm Close Relay Output
Base + 16	Execute Close Relay Output
Base + 17	Arm Open Relay Output
Base + 18	Execute Open Relay Output
Base + 19	Arm Close Command Read Back
Base + 20	Arm Open Command Read Back
Base + 21	Execute Close Command Read Back
Base + 22	Execute Open Command Read Back
Base + 23	Command Countdown Timer
Base + 24	Valve Travel Time Limit
Base + 25	Valve Closed Status Feed Back
Base + 26	Valve Closed Status State
Base + 27	Valve Open Status Feed Back
Base + 28	Valve Open Status State
Base + 29	Valve Command Fail Status
	0 = Valve OK 1 = Valve Failed
Base + 30	Valve Control Permissive Status
	0 = Permissives Not Satisfied (No Valve Control Available) 1 = Permissives Satisfied (Valve Control Available)
Base + 31	Discrete Permissive #1
Base + 32	Discrete Permissive #1 Enable State
	0 = Permissive #1 Satisfied When Off (0) 1 = Permissive #1 Satisfied When On (1)
Base + 33	Discrete Permissive #2
Base + 34	Discrete Permissive #2 Enable State
	0 = Permissive #2 Satisfied When Off (0) 1 = Permissive #2 Satisfied When On (1)
Base + 35	Discrete Permissive #3
Base + 36	Discrete Permissive #3 Enable State
	0 = Permissive #3 Satisfied When Off (0) 1 = Permissive #3 Satisfied When On (1)
Base + 37	Discrete Permissive #4
Base + 38	Discrete Permissive #4 Enable State
	0 = Permissive #4 Satisfied When Off (0) 1 = Permissive #4 Satisfied When On (1)

2.31. Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description	
Base + 0	Calc Enable	
	0 = Disabled 1 = Enabled	
Base + 1	Descriptor Text – Text Table Index	
Base + 2	Plunger Calculation ID	
Base + 3	Method	
	0 = Original 1 = Load Factor 2 = Timer 3 = No Pit 4 = Timer No Pit 5 = Manual 6 = Intermitter	
Base + 4	Control	
	0 = Abort 1 = Start 2 = Pause 3 = Resume 4 = Reset 5 = Open Pit 6 = Close Pit	7 = Open Sale 8 = Close Sale 9 = Out OffTime 10 = Out AfterFlow 11= Force to Offtime 12= Force to Ontime 13= Force to Latetime
Base + 5	Meter Run Pt	
Base + 6	PID Loop Pt	
Base + 7	Diff Pres	
Base + 8	Temperature	
Base + 9	Line Pres	
Base + 10	Flow Rate	
Base + 11	Fpv	
Base + 12	Tubing Pres	
Base + 13	Casing Pres	
Base + 14	C T Diff Pres	
Base + 15	T L Diff Pres	
Base + 16	C L Diff Pres	
Base + 17	Tubing ID	
Base + 18	Plunger Sensor	
Base + 19	Low DP Cutoff	
Base + 20	Ontime HHMMSS	
Base + 21	Min Offtime HHMMSS	
Base + 22	Early Arrival HHMMSS	

Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description
Base + 23	Fast Arrival HHMMSS
Base + 24	Slow Arrival HHMMSS
Base + 25	Pit Delay Sec
Base + 26	Min Shut Time
Base + 27	Man Shut In HHMMSS
Base + 28	Afterflow Enable
	0 = Disabled 1 = Enabled
Base + 29	After Flow Time
Base + 30	Afterflow Delay Deadband
Base + 31	TRM
Base + 32	Dec TRM
Base + 33	Inc TRM
Base + 34	Max TRM
Base + 35	Min TRM
Base + 36	Load Factor
Base + 37	Dec Load
Base + 38	Inc Load
Base + 39	Max Load
Base + 40	Min Load
Base + 41	Flow On AND OR
	0 = Logical OR 1 = Logical AND
Base + 42	Flow On Casing Pres Limit
Base + 43	Flow On Casing Pres Tmr
Base + 44	Flow On Tubing Pres Limit
Base + 45	Flow On Tubing Pres Tmr
Base + 46	Flow On C T Diff Pres Limit
Base + 47	Flow On C T Diff Pres Tmr
Base + 48	Flow On T L Diff Pres Limit
Base + 49	Flow On T L Diff Pres Tmr
Base + 50	Flow On C L Diff Pres Limit
Base + 51	Flow On C L Diff Pres Tmr
Base + 52	Shutin On AND OR
	0 = Logical OR 1 = Logical AND
Base + 53	Shutin On Casing Pres Limit
Base + 54	Shutin On Casing Pres Tmr
Base + 55	Shutin On Tubing Pres Limit

Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description
Base + 56	Shutin On Tubing Pres Tmr
Base + 57	Shutin On Flow Rate Limit
Base + 58	Shutin On Flow Rate Tmr
Base + 59	Shutin On C T Diff Pres Limit
Base + 60	Shutin On C T Diff Pres Tmr
Base + 61	Shutin On T L Diff Pres Limit
Base + 62	Shutin On T L Diff Pres Tmr
Base + 63	Shutin On C L Diff Pres Limit
Base + 64	Shutin On C L Diff Pres Tmr
Base + 65	Dec Offtime
Base + 66	Inc Offtime
Base + 67	Max Offtime
Base + 68	Min Offtime
Base + 69	Dec Aftertime
Base + 70	Inc Aftertime
Base + 71	Max Aftertime
Base + 72	Min Aftertime
Base + 73	A Close B Open Enable
	0 = Disabled 1 = Enabled
Base + 74	A Open Status
	0 = Close 1 = Open
Base + 75	B Open Status
	0 = Close 1 = Open
Base + 76	A Close Status
	0 = Close 1 = Open
Base + 77	B Close Status
	0 = Close 1 = Open
Base + 78	A Abort Status
	0 = Abort 1 = Normal
Base + 79	B Abort Status
	0 = Abort 1 = Normal
Base + 80	B Open Time
Base + 81	PID Set Point

Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description
Base + 82	PID Cutoff
Base + 83	C L Override
	0 = Disabled 1 = Enabled
Base + 84	C L Override Diff
Base + 85	Sale Feed Back
Base + 86	Pit Feed Back
Base + 87	Casing Setpoint
Base + 88	Casing Enable
	0 = Disabled 1 = Enabled
Base + 89	Hi Press PSI
Base + 90	No Fast Arr
Base + 91	No Slow Arr
Base + 92	No Normal Arr
Base + 93	No Late Arr
Base + 94	No No Arr
Base + 95	No No Cycles
Base + 96	Con No Arr
Base + 97	Cycles Before Main
Base + 98	Max Con No Arrivals
Base + 99	Max Con Early Arrivals
Base + 100	Max Build T
Base + 101	Log Interval
Base + 102	Sale Leak
	0 = Disabled 1 = Enabled
Base + 103	Force To Default
	0 = Disabled 1 = Enabled
Base + 104	Continue Cycle
	0 = Disabled 1 = Enabled
Base + 105	Flow Alarm Flag
	0 = Disabled 1 = Enabled
Base + 106	Callout Flag
	0 = Idle 1 = Active
Base + 107	Anlg Fail Timer

Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description	
Base + 108	Battery Voltage Setting	
Base + 109	Battery Voltage	
Base + 110	Purge Delay	
Base + 111	Cycle Hist Data Block Ndx	
Base + 112	Minute Hist Data Block Ndx	
Base + 113	Kb Hld Time	
Base + 114	Msg	
	0 = None 1 = Plunger In Hold 2 = Pit Opened 3 = Plunger Dropping 4 = Offtime Msg 5 = Hi Line Pressure 6 = Open Sale 7 = Fast Arrival 8 = Normal Arrival 9 = AfterFlow	10 = Casing LT Line 11 = Pit Open 12 = Pit Closed 13 = Completed Cycle 14 = Consecutive No Arrival 15 = Needs Maintance 16 = Delay Shut Time 17 = Mandatory Delay 18 = Config Error
Base + 115	Plunger Arrival	
	0 = Waiting 1 = Arrived	
Base + 116	Control Status	
	0 = Abort 1 = Start 2 = Pause 3 = Resume 4 = Reset 5 = Open Pit	6 = Close Pit 7 = Open Sale 8 = Close Sale 9 = Out OffTime 10 = Out AfterFlow
Base + 117	Control State	
	0 = Init 1 = Wait Pit Close 2 = Off Loop 3 = Off Press1 4 = Off Press2 5 = Off Press3 6 = On Loop 7 = Slow Plunger 8 = Slow Ontime 9 = Slow Pit Close 10 = Slow Sale Close	11 = A Shutin 1 12 = A Shutin 2 13 = A Shutin 3 14 = Cycle 15 = Maintance 16 = Analog Fail 17 = Early Arrivals GT Max 18 = Num Arrivals GT Max 19 = Sales Leak 20 = Purge
Base + 118	Control Time	
Base + 119	Delay Time	
Base + 120	Alarm State	
Base + 121	Alarm Time	

Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description
Base + 122	A State
Base + 123	B State
Base + 124	A Lift Cts
Base + 125	B Lift Cts
Base + 126	Shut In Rate
Base + 127	R6 Pit Delay Sec
Base + 128	R5 Ontime Sec
Base + 129	R7 Cur Offtime Sec
Base + 130	R8 Cur Arr Time Sec
Base + 131	R9 Cur Afterflow Sec
Base + 132	Last Load Ratio
Base + 133	Last2 Load Ratio
Base + 134	Casing Prs Offtime
Base + 135	L Afterflow T Sec
Base + 136	L2 Afterflow T Sec
Base + 137	Casing Prs Aflow
Base + 138	Last Off Sec
Base + 139	Current Load Ratio
Base + 140	Last2 Off Sec
Base + 141	Tubing Prs Offtime
Base + 142	Last Arr T Sec
Base + 143	Last2 Arr T Sec
Base + 144	Tubing Prs Aflow
Base + 145	Plunger Summary No No Cycles
Base + 146	Plunger Summary No No Arr
Base + 147	Plunger Summary No Fast Arr
Base + 148	Plunger Summary No Slow Arr
Base + 149	Plunger Summary No Normal Arr
Base + 150	Plunger Summary No Late Arr
Base + 151	Plunger Summary Con No Arr
Base + 152	Plunger Summary No Early Arr
Base + 153	Plunger Summary Con Early Arr
Base + 154	Plunger Summary No Un Sensor Arr
Base + 155	Plunger Summary Timer1
Base + 156	Plunger Summary Timer2
Base + 157	Plunger Summary Timer3
Base + 158	Kb State
Base + 159	Kb State Ind

Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description	
	0 = Offtime Phase 1 = Ontime Phase 2 = Afterflow Phase 3 = Waiting Phase 4 = Slow Phase	5 = Abort Phase 6 = Pause Phase 7 = Resume Phase 8 = Mandoff Phase
Base + 160	Kb Timer	
Base + 161	Tubing Pres Array[0]	
Base + 162	Tubing Pres Array[1]	
Base + 163	Tubing Pres Array[2]	
Base + 164	Tubing Pres Array[3]	
Base + 165	Tubing Pres Array[4]	
Base + 166	Tubing Pres Array[5]	
Base + 167	Tubing Pres Array[6]	
Base + 168	Tubing Pres Array[7]	
Base + 169	Tubing Pres Array[8]	
Base + 170	Tubing Pres Array[9]	
Base + 171	Casing Pres Array[0]	
Base + 172	Casing Pres Array[1]	
Base + 173	Casing Pres Array[2]	
Base + 174	Casing Pres Array[3]	
Base + 175	Casing Pres Array[4]	
Base + 176	Casing Pres Array[5]	
Base + 177	Casing Pres Array[6]	
Base + 178	Casing Pres Array[7]	
Base + 179	Casing Pres Array[8]	
Base + 180	Casing Pres Array[9]	
Base + 181	Flow Rate Array[0]	
Base + 182	Flow Rate Array[1]	
Base + 183	Flow Rate Array[2]	
Base + 184	Flow Rate Array[3]	
Base + 185	Flow Rate Array[4]	
Base + 186	Flow Rate Array[5]	
Base + 187	Flow Rate Array[6]	
Base + 188	Flow Rate Array[7]	
Base + 189	Flow Rate Array[8]	
Base + 190	Flow Rate Array[9]	
Base + 191	Line Pres Array[0]	
Base + 192	Line Pres Array[1]	
Base + 193	Line Pres Array[2]	

Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description
Base + 194	Line Pres Array[3]
Base + 195	Line Pres Array[4]
Base + 196	Line Pres Array[5]
Base + 197	Line Pres Array[6]
Base + 198	Line Pres Array[7]
Base + 199	Line Pres Array[8]
Base + 200	Line Pres Array[9]
Base + 201	Off Time Array[0]
Base + 202	Off Time Array[1]
Base + 203	Off Time Array[2]
Base + 204	Off Time Array[3]
Base + 205	Off Time Array[4]
Base + 206	Off Time Array[5]
Base + 207	Off Time Array[6]
Base + 208	Off Time Array[7]
Base + 209	Off Time Array[8]
Base + 210	Off Time Array[9]
Base + 211	Cycle Arrival Time[0]
Base + 212	Cycle Arrival Time[1]
Base + 213	Cycle Arrival Time[2]
Base + 214	Cycle Arrival Time[3]
Base + 215	Cycle Arrival Time[4]
Base + 216	Cycle Arrival Time[5]
Base + 217	Cycle Arrival Time[6]
Base + 218	Cycle Arrival Time[7]
Base + 219	Cycle Arrival Time[8]
Base + 220	Cycle Arrival Time[9]
Base + 221	Arrival Time Array[0]
Base + 222	Arrival Time Array[1]
Base + 223	Arrival Time Array[2]
Base + 224	Arrival Time Array[3]
Base + 225	Arrival Time Array[4]
Base + 226	Arrival Time Array[5]
Base + 227	Arrival Time Array[6]
Base + 228	Arrival Time Array[7]
Base + 229	Arrival Time Array[8]
Base + 230	Arrival Time Array[9]
Base + 231	Aflow Time Array[0]

Table 65: Plunger Lift Calculation Modbus Register Assignments

Register Number	Data Description
Base + 232	Aflow Time Array[1]
Base + 233	Aflow Time Array[2]
Base + 234	Aflow Time Array[3]
Base + 235	Aflow Time Array[4]
Base + 236	Aflow Time Array[5]
Base + 237	Aflow Time Array[6]
Base + 238	Aflow Time Array[7]
Base + 239	Aflow Time Array[8]
Base + 240	Aflow Time Array[9]
Base + 241	Load Ratio Array[0]
Base + 242	Load Ratio Array[1]
Base + 243	Load Ratio Array[2]
Base + 244	Load Ratio Array[3]
Base + 245	Load Ratio Array[4]
Base + 246	Load Ratio Array[5]
Base + 247	Load Ratio Array[6]
Base + 248	Load Ratio Array[7]
Base + 249	Load Ratio Array[8]
Base + 250	Load Ratio Array[9]
Base + 251	A Solenoid Type
	0 = 2-Wire 1 = 3-Wire
Base + 252	B Solenoid Type
	0 = 2-Wire 1 = 3-Wire
Base + 253	Last Method
Base + 254	Lo Press PSI
Base + 255	Side Pressure
Base + 256	Side Pressure At A Valve Open
Base + 257	Alarm Delay Timer
Base + 258	Deadman Timer
Base + 259	Abort Timer
Base + 260	Delay A Close Time (HHMMSS)
Base + 261	Delay A Open Time (HHMMSS)
Base + 262	Delay B Close Time (HHMMSS)
Base + 263	Delay B Open Time (HHMMSS)
Base + 264	Tubing High Limit
Base + 265	Tubing Low Limit
Base + 266	Casing High Limit

Register Number	Data Description
Base + 267	Maximum Highs
Base + 268	B ASSIST TYPE
Base + 269	B ASSIST TIMER
Base + 270	FLOW ON AUX1 VALUE
Base + 271	FLOW ON AUX1 LIMIT
Base + 272	FLOW ON AUX1 TMR
Base + 273	SHUTIN ON AUX1 VALUE
Base + 274	SHUTIN ON AUX1 LIMIT
Base + 275	SHUTIN ON AUX1 TMR
Base + 276	FLOW ON AUX2 VALUE
Base + 277	FLOW ON AUX2 LIMIT
Base + 278	FLOW ON AUX2 TMR
Base + 279	SHUTIN ON AUX2 VALUE
Base + 280	SHUTIN ON AUX2 LIMIT
Base + 281	SHUTIN ON AUX2 TMR

2.32. Table 67: Valve Sequencing & Flow Direction Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	Valve Sequence & Flow Direction Calculation ID
Base + 1	Valve Sequence & Flow Control Calculation Enable
	0 = Disabled 1 = Enabled
Base + 2	Remote/Local Control Mode
	0 = Local Mode 1 = Remote Mode
Base + 3	Local Control Always Enabled
	0 = Local Not Always Enabled 1 = Local Always Enabled
Base + 4	Local Sequence #1 Start
	0 = Idle 1 = Start Sequence #1
Base + 5	Remote Sequence #1 Start
	0 = Idle 1 = Start Sequence #1
Base + 6	Local Sequence #2 Start
	0 = Idle 1 = Start Sequence #1
Base + 7	Remote Sequence #2 Start
	0 = Idle 1 = Start Sequence #1

Table 67: Valve Sequencing & Flow Direction Calculation Modbus Register Assignments

Register Number	Data Description
Base + 8	Abort Sequence
	0 = Idle 1 = Abort Current Sequence
Base + 9	After Valve Control Idle Time
Base + 10	Valve Open Timeout Limit
Base + 11	Valve Close Timeout Limit
Base + 12	Valve #1 Open Relay Output
Base + 13	Valve #1 Close Relay Output
Base + 14	Valve #1 Open Discrete Input
Base + 15	Valve #1 Close Discrete Input
Base + 16	Valve #1 Fail Status
	0 = OK 1 = Failed
Base + 17	Valve #1 Current Valve Position
	0 = Valve Closed 1 = Valve Open 2 = Valve Travel
Base + 18	Valve #2 Open Relay Output
Base + 19	Valve #2 Close Relay Output
Base + 20	Valve #2 Open Discrete Input
Base + 21	Valve #2 Close Discrete Input
Base + 22	Valve #2 Fail Status
	0 = OK 1 = Failed
Base + 23	Valve #2 Current Valve Position
	0 = Valve Closed 1 = Valve Open 2 = Valve Travel
Base + 24	Valve #3 Open Relay Output
Base + 25	Valve #3 Close Relay Output
Base + 26	Valve #3 Open Discrete Input
Base + 27	Valve #3 Close Discrete Input
Base + 28	Valve #3 Fail Status
	0 = OK 1 = Failed
Base + 29	Valve #3 Current Valve Position
	0 = Valve Closed 1 = Valve Open 2 = Valve Travel
Base + 30	Valve #4 Open Relay Output

Table 67: Valve Sequencing & Flow Direction Calculation Modbus Register Assignments

Register Number	Data Description
Base + 31	Valve #4 Close Relay Output
Base + 32	Valve #4 Open Discrete Input
Base + 33	Valve #4 Close Discrete Input
Base + 34	Valve #4 Fail Status
	0 = OK 1 = Failed
Base + 35	Valve #4 Current Valve Position
	0 = Valve Closed 1 = Valve Open 2 = Valve Travel
Base + 36	Valve #5 Open Relay Output
Base + 37	Valve #5 Close Relay Output
Base + 38	Valve #5 Open Discrete Input
Base + 39	Valve #5 Close Discrete Input
Base + 40	Valve #5 Fail Status
	0 = OK 1 = Failed
Base + 41	Valve #5 Current Valve Position
	0 = Valve Closed 1 = Valve Open 2 = Valve Travel
Base + 42	Valve #6 Open Relay Output
Base + 43	Valve #6 Close Relay Output
Base + 44	Valve #6 Open Discrete Input
Base + 45	Valve #6 Close Discrete Input
Base + 46	Valve #6 Fail Status
	0 = OK 1 = Failed
Base + 47	Valve #6 Current Valve Position
	0 = Valve Closed 1 = Valve Open 2 = Valve Travel
Base + 48	Valve #7 Open Relay Output
Base + 49	Valve #7 Close Relay Output
Base + 50	Valve #7 Open Discrete Input
Base + 51	Valve #7 Close Discrete Input
Base + 52	Valve #7 Fail Status
	0 = OK 1 = Failed
Base + 53	Valve #7 Current Valve Position

Table 67: Valve Sequencing & Flow Direction Calculation Modbus Register Assignments

Register Number	Data Description
	0 = Valve Closed 1 = Valve Open 2 = Valve Travel
Base + 54	Valve #8 Open Relay Output
Base + 55	Valve #8 Close Relay Output
Base + 56	Valve #8 Open Discrete Input
Base + 57	Valve #8 Close Discrete Input
Base + 58	Valve #8 Fail Status
	0 = OK 1 = Failed
Base + 59	Valve #8 Current Valve Position
	0 = Valve Closed 1 = Valve Open 2 = Valve Travel
Base + 60	Sequence #1 Current Step
	0 = Idle 1–16 = Current Step
Base + 61	Sequence #1 Output
	0 = Off 1 = On
Base + 62	Sequence #1 End Status
	0 = Normal 1 = Failed 2 = Aborted
Base + 63	Sequence #2 Current Step
	0 = Idle 1–16 = Current Step
Base + 64	Sequence #2 Output
	0 = Off 1 = On
Base + 65	Sequence #2 End Status
	0 = Normal 1 = Failed 2 = Aborted
Base + 66	Valve Status Mode
	0 = Blind Valve 1 = Valve With Discrete Feedback
Base + 67	Valve Open – Open Discrete State
	0 = Open Discrete State Off 1 = Open Discrete State On
Base + 68	Valve Open – Close Discrete State

Table 67: Valve Sequencing & Flow Direction Calculation Modbus Register Assignments

Register Number	Data Description
	0 = Open Discrete State Off 1 = Open Discrete State On
Base + 69	Valve Close – Open Discrete State
	0 = Close Discrete State Off 1 = Close Discrete State On
Base + 70	Valve Close – Close Discrete State
	0 = Close Discrete State Off 1 = Close Discrete State On
Base + 71	Sequence #1 Output on Abort
	0 = No Change 1 = Both Sequence #1 And Sequence #2 On 2 = Both Sequence #1 And Sequence #2 Off 3 = Sequence #1 On And Sequence #2 Off 4 = Sequence #1 Off and Sequence #2 On
Base + 72	Sequence #1 Output on Fail
	0 = No Change 1 = Both Sequence #1 And Sequence #2 On 2 = Both Sequence #1 And Sequence #2 Off 3 = Sequence #1 On And Sequence #2 Off 4 = Sequence #1 Off and Sequence #2 On
Base + 73	Sequence #1 Fail Action
	0 = Halt Sequence 1 = Reverse Sequence 2 = Close All Valves 3 = Open All Valves 4 = Start Sequence #1 5 = Start Sequence #2
Base + 74	Sequence #2 Output on Abort
	0 = No Change 1 = Both Sequence #1 And Sequence #2 On 2 = Both Sequence #1 And Sequence #2 Off 3 = Sequence #1 On And Sequence #2 Off 4 = Sequence #1 Off and Sequence #2 On
Base + 75	Sequence #2 Output on Fail
	0 = No Change 1 = Both Sequence #1 And Sequence #2 On 2 = Both Sequence #1 And Sequence #2 Off 3 = Sequence #1 On And Sequence #2 Off 4 = Sequence #1 Off and Sequence #2 On
Base + 76	Sequence #2 Fail Action
	0 = Halt Sequence 1 = Reverse Sequence 2 = Close All Valves

Table 67: Valve Sequencing & Flow Direction Calculation Modbus Register Assignments

Register Number	Data Description	
	3 = Open All Valves 4 = Start Sequence #1 5 = Start Sequence #2	
Base + 77	Countdown Timer	
Base + 78	Valve Position Alarm	
	0 = OK 1 = Alarm	
Base + 79	Valve Control Lockout	
	0 = OK 1 = Locked	
Base + 80	Valve Lockout Enable	
	0 = Lockout Disabled 1 = Lockout Enabled	
Base + 81	Number of Valves	
Base + 82	Rate Limit Lockout Enable	
	0 = Lockout Disabled 1 = Lockout Enabled	
Base + 83	Rate Limit	
Base + 84	Rate Input #1	
Base + 85	Rate Input #2	
Base + 86	Rate Limit Lockout	
	0 = OK 1 = Locked	
Base + 87	Sequence #1 Auto-Repeat	
	0 = Single Execution 1 = Auto-Repeat	
Base + 88	Sequence #2 Auto-Repeat	
	0 = Single Execution 1 = Auto-Repeat	
Base + 89	Current Operation	
	0 = Idle 1 = Opening Valve #1 2 = Opening Valve #2 3 = Opening Valve #3 4 = Opening Valve #4 5 = Opening Valve #5 6 = Opening Valve #6 7 = Opening Valve #7 8 = Opening Valve #8 9 = Closing Valve #1	10 = Closing Valve #2 11 = Closing Valve #3 12 = Closing Valve #4 13 = Closing Valve #5 14 = Closing Valve #6 15 = Closing Valve #7 16 = Closing Valve #8 17 = Executing Delay 18 = After Control Delay 19 = Extra Relay Time Delay
Base + 90	Valve Extra Control Time	
Base + 91	Current Executing Sequence	

Table 67: Valve Sequencing & Flow Direction Calculation Modbus Register Assignments

Register Number	Data Description
	0 = No Sequence Executing 1 = Sequence #1 2 = Sequence #2 3 = Fail Sequence 4 = Abort Sequence
Base + 92	Direction Detection Mode
	0 = Disabled 1 = Single Discrete Feedback 2 = Dual Discrete Feedback 3 = Valve Position Feedback
Base + 93	Direction Discrete Input #1
	0 = Off 1 = On
Base + 94	Direction Discrete Input #2
	0 = Off 1 = On
Base + 95	Discrete Input #1 Forward Flow State
	0 = Off 1 = On
Base + 96	Discrete Input #2 Forward Flow State
	0 = Off 1 = On
Base + 97	Discrete Input #1 Reverse Flow State
	0 = Off 1 = On
Base + 98	Discrete Input #2 Reverse Flow State
	0 = Off 1 = On
Base + 99	Valve #1 Forward State
	0 = Valve Closed 1 = Valve Opened
Base + 100	Valve #2 Forward State
	0 = Valve Closed 1 = Valve Opened
Base + 101	Valve #3 Forward State
	0 = Valve Closed 1 = Valve Opened
Base + 102	Valve #4 Forward State
	0 = Valve Closed 1 = Valve Opened
Base + 103	Valve #5 Forward State

Table 67: Valve Sequencing & Flow Direction Calculation Modbus Register Assignments

Register Number	Data Description
	0 = Valve Closed 1 = Valve Opened
Base + 104	Valve #6 Forward State
	0 = Valve Closed 1 = Valve Opened
Base + 105	Valve #7 Forward State
	0 = Valve Closed 1 = Valve Opened
Base + 106	Valve #8 Forward State
	0 = Valve Closed 1 = Valve Opened
Base + 107	Valve #1 Reverse State
	0 = Valve Closed 1 = Valve Opened
Base + 108	Valve #2 Reverse State
	0 = Valve Closed 1 = Valve Opened
Base + 109	Valve #3 Reverse State
	0 = Valve Closed 1 = Valve Opened
Base + 110	Valve #4 Reverse State
	0 = Valve Closed 1 = Valve Opened
Base + 111	Valve #5 Reverse State
	0 = Valve Closed 1 = Valve Opened
Base + 112	Valve #6 Reverse State
	0 = Valve Closed 1 = Valve Opened
Base + 113	Valve #7 Reverse State
	0 = Valve Closed 1 = Valve Opened
Base + 114	Valve #8 Reverse State
	0 = Valve Closed 1 = Valve Opened
Base + 115	Current Direction – Forward Direction
	0 = Not Forward 1 = Forward
Base + 116	Current Direction – Reverse Direction
	0 = Not Reverse 1 = Reverse

Register Number	Data Description
Base + 117	Current Direction – Unknown Direction
	0 = OK 1 = Unknown

2.33. Table 100: Chromatograph Modbus Register Assignments

Register Number	Data Description
Base + 0	Chromatograph ID
Base + 1	Chromatograph Enable
	0 = Disabled 1 = Enabled
Base + 2	Chromatograph Type
	0 = Danalyzer
Base + 3	Chromatograph Address
Base + 4	Chromatograph Stream Number
Base + 5	Chromatograph Comm Status
	0 = Communications OK 1 = Illegal Function 2 = Illegal Data Address 3 = Illegal Data Value 4 = No Response 5 = Transmit Failure
Base + 6	Chromatograph Comm Options
Base + 7	Chromatograph Alarm Status
	0 = No Alarms 1 = 3046/3047 Custom Mask Alarm 2 = Checksum Failure 3 = Analyzer Failure 4 = A/D 0 High 5 = A/D 0 Low 6 = Preamp Failure 7 = RF % Deviation 8 = Power Fail 9 = Component High/Low Value Limit Alarm 10 = Total Mole % High/Low Value Limit Alarm
Base + 8	GQ Block Index
Base + 9	BTU
Base + 10	Specific Gravity
Base + 11	Methane Content
Base + 12	Nitrogen Content
Base + 13	CO2 Content
Base + 14	Ethane Content

Table 100: Chromatograph Modbus Register Assignments

Register Number	Data Description
Base + 15	Propane Content
Base + 16	Water Content
Base + 17	H2S Content
Base + 18	Hydrogen Content
Base + 19	CO Content
Base + 20	Oxygen Content
Base + 21	I-Butane Content
Base + 22	N-Butane Content
Base + 23	I-Pentane Content
Base + 24	N-Pentane Content
Base + 25	C6+ Content
Base + 26	Hexane Content
Base + 27	Heptane Content
Base + 28	Octane Content
Base + 29	Nonane Content
Base + 30	Decane Content
Base + 31	Helium Content
Base + 32	Argon Content
Base + 33	Air Content
Base + 34	Neo-Pentane Content
Base + 35	Wobbe Index
Base + 36	High/Low Limit Alarming Enable
	0 = Disabled 1 = Enabled
Base + 37	High/Low Limit Alarm Status
	0 = High/Low Alarm Clear 1 = High/Low Alarm Active
Base + 38	High/Low Limit Alarm Data Handling
	0 = Don’t Update GQ Table 1 = Update GQ Table with Chromatograph Values 2 = Update GQ Table with Default Values 3 = Update GQ Table with Limited Values
Base + 39	Total Mole % Alarming Enable
	0 = Disabled 1 = Enabled
Base + 40	Total Mole % Alarm Status
	0 = Total Mole % High/Low Alarm Clear 1 = Total Mole % High/Low Alarm Active
Base + 41	Total Mole % Alarm Data Handling
	0 = Don’t Update GQ Table

Register Number	Data Description
	1 = Update GQ Table with Chromatograph Values 2 = Update GQ Table with Default Values
Base + 42	Total Mole %
Base + 43	3046/3047 Status Alarm Mode
	0 = Enabled with Default 3046/3047 Alarm Mask 1 = Disabled 2 = Enabled with Custom 3046/3047 Alarm Masks
Base + 44	3046/3047 Status Alarm Status
	0 = 3046/3047 Alarm Clear 1 = 3046/3047 Alarm Active
Base + 45	3046/3047 Alarm Data Handling
	0 = Don't Update GQ Table 1 = Update GQ Table with Chromatograph Values 2 = Update GQ Table with Default Values
Base + 46	3046 Live Value
Base + 47	3046 Alarm Mask
Base + 48	3047 Alarm Value
Base + 49	3047 Alarm Mask
Base + 50	C6+ Custom Split Enable
	0 = Custom Percentages Disabled (use standard percentages) 1 = Use Custom Percentages

2.34. Table 101: Tank Gauge Calculation Modbus Register Assignments

Register Number	Data Description
Base + 0	Tank Calculation ID
Base + 1	Calc Enable
	0 = Disabled 1 = Enabled
Base + 2	Type
Base + 3	Sensor Address
Base + 4	Communications Status
	0 = Communications OK 1 = Illegal Function 2 = Illegal Data Address 3 = Illegal Data Value 4 = No Response 5 = Transmit Failure
Base + 5	Sensor Offset
Base + 6	Power Control
Base + 7	Float Level Engineering Units

Table 101: Tank Gauge Calculation Modbus Register Assignments

Register Number	Data Description
Base + 8	Temperature Engineering Units
Base + 9	Table #43 Index
Base + 10	Float #1 Descriptor Text – Text Table Index
Base + 11	Float #1Status
	0 = Not Present 1 = Present
Base + 12	Float #1 Level
Base + 13	Float #1 High Alarm Limit
Base + 14	Float #1 High Limit Alarm Status
	0 = Alarm Clear 1 = Alarm Active
Base + 15	Float #1 High Limit Shutin Enable
	0 = High Limit Shutin Disabled 1 = High Limit Shutin Enabled
Base + 16	Float #1 Low Alarm Limit
Base + 17	Float #1 Low Limit Alarm Status
	0 = Alarm Clear 1 = Alarm Active
Base + 18	Float #1 Low Limit Shutin Enable
	0 = Low Limit Shutin Disabled 1 = Low Limit Shutin Enabled
Base + 19	Float #1 High Shutin Discrete Input
	0 = No Shutin 1 = Shutin
Base + 20	Float #1 High Shutin on Discrete Input Enable
	0 = Shutin on High Discrete Input Disabled 1 = Shutin on High Discrete Input Enabled
Base + 21	Float #1 Low Shutin Discrete Input
	0 = No Shutin 1 = Shutin
Base + 22	Float #1 Low Shutin on Discrete Input Enable
	0 = Shutin on Low Discrete Input Disabled 1 = Shutin on Low Discrete Input Enabled
Base + 23	Float #1 Shutin Command
	0 = No Change 1 = Clear Shutin 2 = Shutin
Base + 24	Float #1 Shutin Status
	0 = No Shutin 1 = Shutin

Table 101: Tank Gauge Calculation Modbus Register Assignments

Register Number	Data Description
Base + 25	Float #1 Shutin Discrete Output
	0 = No Shutin 1 = Shutin
Base + 26*	Float #2 Descriptor Text – Text Table Index
Base + 27	Float #2 Status
	0 = Not Present 1 = Present
Base + 28	Float #2 Level
Base + 29	Float #2 High Alarm Limit
Base + 30	Float #2 High Limit Alarm Status
	0 = Alarm Clear 1 = Alarm Active
Base + 31	Float #2 High Limit Shutin Enable
	0 = High Limit Shutin Disabled 1 = High Limit Shutin Enabled
Base + 32	Float #2 Low Alarm Limit
Base + 33	Float #2 Low Limit Alarm Status
	0 = Alarm Clear 1 = Alarm Active
Base + 34	Float #2 Low Limit Shutin Enable
	0 = Low Limit Shutin Disabled 1 = Low Limit Shutin Enabled
Base + 35	Float #2 High Shutin Discrete Input
	0 = No Shutin 1 = Shutin
Base + 36	Float #2 High Shutin on Discrete Input Enable
	0 = Shutin on High Discrete Input Disabled 1 = Shutin on High Discrete Input Enabled
Base + 37	Float #2 Low Shutin Discrete Input
	0 = No Shutin 1 = Shutin
Base + 38	Float #2 Low Shutin on Discrete Input Enable
	0 = Shutin on Low Discrete Input Disabled 1 = Shutin on Low Discrete Input Enabled
Base + 39	Float #2 Shutin Command
	0 = No Change 1 = Clear Shutin 2 = Shutin
Base + 40	Float #2 Shutin Status
	0 = No Shutin 1 = Shutin

Table 101: Tank Gauge Calculation Modbus Register Assignments

Register Number	Data Description
Base + 41	Float #2 Shutin Discrete Output
	0 = No Shutin 1 = Shutin
Base + 42	Float #3 Descriptor Text – Text Table Index
Base + 43	Float #3 Status
	0 = Not Present 1 = Present
Base + 44	Float #3 Level
Base + 45	Float #3 High Alarm Limit
Base + 46	Float #3 High Limit Alarm Status
	0 = Alarm Clear 1 = Alarm Active
Base + 47	Float #3 High Limit Shutin Enable
	0 = High Limit Shutin Disabled 1 = High Limit Shutin Enabled
Base + 48	Float #3 Low Alarm Limit
Base + 49	Float #3 Low Limit Alarm Status
	0 = Alarm Clear 1 = Alarm Active
Base + 50	Float #3 Low Limit Shutin Enable
	0 = Low Limit Shutin Disabled 1 = Low Limit Shutin Enabled
Base + 51	Float #3 High Shutin Discrete Input
	0 = No Shutin 1 = Shutin
Base + 52	Float #3 High Shutin on Discrete Input Enable
	0 = Shutin on High Discrete Input Disabled 1 = Shutin on High Discrete Input Enabled
Base + 53	Float #3 Low Shutin Discrete Input
	0 = No Shutin 1 = Shutin
Base + 54	Float #3 Low Shutin on Discrete Input Enable
	0 = Shutin on Low Discrete Input Disabled 1 = Shutin on Low Discrete Input Enabled
Base + 55	Float #3 Shutin Command
	0 = No Change 1 = Clear Shutin 2 = Shutin
Base + 56	Float #3 Shutin Status
	0 = No Shutin 1 = Shutin

Table 101: Tank Gauge Calculation Modbus Register Assignments

Register Number	Data Description
Base + 57	Float #3 Shutin Discrete Output
	0 = No Shutin 1 = Shutin
Base + 58	Float #4 Descriptor Text – Text Table Index (Temperature)
Base + 59	Float #4 Status
	0 = Not Present 1 = Present
Base + 60	Float #4 Level
Base + 61	Float #4 High Alarm Limit
Base + 62	Float #4 High Limit Alarm Status
	0 = Alarm Clear 1 = Alarm Active
Base + 63	Float #4 High Limit Shutin Enable
	0 = High Limit Shutin Disabled 1 = High Limit Shutin Enabled
Base + 64	Float #4 Low Alarm Limit
Base + 65	Float #4 Low Limit Alarm Status
	0 = Alarm Clear 1 = Alarm Active
Base + 66	Float #4 Low Limit Shutin Enable
	0 = Low Limit Shutin Disabled 1 = Low Limit Shutin Enabled
Base + 67	Float #4 High Shutin Discrete Input
	0 = No Shutin 1 = Shutin
Base + 68	Float #4 High Shutin on Discrete Input Enable
	0 = Shutin on High Discrete Input Disabled 1 = Shutin on High Discrete Input Enabled
Base + 69	Float #4 Low Shutin Discrete Input
	0 = No Shutin 1 = Shutin
Base + 70	Float #4 Low Shutin on Discrete Input Enable
	0 = Shutin on Low Discrete Input Disabled 1 = Shutin on Low Discrete Input Enabled
Base + 71	Float #4 Shutin Command
	0 = No Change 1 = Clear Shutin 2 = Shutin
Base + 72	Float #4 Shutin Status
	0 = No Shutin 1 = Shutin

Table 101: Tank Gauge Calculation Modbus Register Assignments

Register Number	Data Description
Base + 73	Float #4 Shutin Discrete Output
	0 = No Shutin 1 = Shutin
Base + 74	Steady Count
Base + 75	Contract Hour
Base + 76	Minimum Production Level
Base + 77	Minimum Draw Level
Base + 78	Deadband
Base + 79	Eng Units Per Inch
Base + 80	Current Day Production Level
Base + 81	Current Month Production Level
Base + 82	Current Day Draw Level
Base + 83	Current Month Draw Level
Base + 84	Previous Day Production Level
Base + 85	Previous Month Production Level
Base + 86	Previous Day Draw Level
Base + 87	Previous Month Draw Level
Base + 88	Current Day Production Volume
Base + 89	Current Month Production Volume
Base + 90	Current Day Draw Volume
Base + 91	Current Month Draw Volume
Base + 92	Previous Day Production Volume
Base + 93	Previous Month Production Volume
Base + 94	Previous Day Draw Volume
Base + 95	Previous Month Draw Volume
Base + 96	Current Day Oil Production Level
Base + 97	Current Month Oil Production Level
Base + 98	Current Day Oil Draw Level
Base + 99	Current Month Oil Draw Level
Base + 100	Previous Day Oil Production Level
Base + 101	Previous Month Oil Production Level
Base + 102	Previous Day Oil Draw Level
Base + 103	Previous Month Oil Draw Level
Base + 104	Current Day Oil Production Volume
Base + 105	Current Month Oil Production Volume
Base + 106	Current Day Oil Draw Volume
Base + 107	Current Month Oil Draw Volume
Base + 108	Previous Day Oil Production Volume
Base + 109	Previous Month Oil Production Volume

Register Number	Data Description
Base + 110	Previous Day Oil Draw Volume
Base + 111	Previous Month Oil Draw Volume
Base + 112	Current Day Water Production Level
Base + 113	Current Month Water Production Level
Base + 114	Current Day Water Draw Level
Base + 115	Current Month Water Draw Level
Base + 116	Previous Day Water Production Level
Base + 117	Previous Month Water Production Level
Base + 118	Previous Day Water Draw Level
Base + 119	Previous Month Water Draw Level
Base + 120	Current Day Water Production Volume
Base + 121	Current Month Water Production Volume
Base + 122	Current Day Water Draw Volume
Base + 123	Current Month Water Draw Volume
Base + 124	Previous Day Water Production Volume
Base + 125	Previous Month Water Production Volume
Base + 126	Previous Day Water Draw Volume
Base + 127	Previous Month Water Draw Volume

2.35. Table 128: Gas Quality Block Modbus Register Assignments

Register Number	Data Description
Base + 0	Gas Quality Data Descriptor Text – Text Table Index
Base + 1	Gas Quality Data ID
Base + 2	BTU Content
Base + 3	Specific Gravity
Base + 4	Methane Content
Base + 5	Nitrogen Content
Base + 6	Carbon Dioxide Content
Base + 7	Ethane Content
Base + 8	Propane Content
Base + 9	Water Content
Base + 10	Hydrogen Sulfide Content
Base + 11	Hydrogen Content
Base + 12	Carbon Monoxide Content
Base + 13	Oxygen Content
Base + 14	I-Butane Content
Base + 15	N-Butane Content

Register Number	Data Description
Base + 16	I-Pentane Content
Base + 17	N-Pentane Content
Base + 18	C6+ Content
Base + 19	N-Hexane Content
Base + 20	N-Heptane Content
Base + 21	N-Octane Content
Base + 22	N-Nonane Content
Base + 23	N-Decane Content
Base + 24	Helium Content
Base + 25	Argon Content
Base + 26	Air Content
Base + 27	Neo-Pentane
Base + 28	Audit Register Offset

2.36. Table 160: IsaGraph Discrete Input Modbus Register Assignments

Register Number	Data Description
Base + 0	IsaGraph Discrete Input #1 Value
Base + 1	IsaGraph Discrete Input #2 Value
Base + 2	IsaGraph Discrete Input #3 Value
Base + 3	IsaGraph Discrete Input #4 Value
Base + 4	IsaGraph Discrete Input #5 Value
Base + 5	IsaGraph Discrete Input #6 Value
Base + 6	IsaGraph Discrete Input #7 Value
Base + 7	IsaGraph Discrete Input #8 Value

2.37. Table 161: IsaGraph Analog Input Modbus Register Assignments

Register Number	Data Description
Base + 0	IsaGraph Analog Input #1 Value
Base + 1	IsaGraph Analog Input #2 Value
Base + 2	IsaGraph Analog Input #3 Value

Register Number	Data Description
Base + 3	IsaGraph Analog Input #4 Value
Base + 4	IsaGraph Analog Input #5 Value
Base + 5	IsaGraph Analog Input #6 Value
Base + 6	IsaGraph Analog Input #7 Value
Base + 7	IsaGraph Analog Input #8 Value

2.38. Table 162: IsaGraph Accumulator Input Modbus Register Assignments

Register Number	Data Description
Base + 0	IsaGraph Accumulator Input #1 Value
Base + 1	IsaGraph Accumulator Input #2 Value
Base + 2	IsaGraph Accumulator Input #3 Value
Base + 3	IsaGraph Accumulator Input #4 Value
Base + 4	IsaGraph Accumulator Input #5 Value
Base + 5	IsaGraph Accumulator Input #6 Value
Base + 6	IsaGraph Accumulator Input #7 Value
Base + 7	IsaGraph Accumulator Input #8 Value

2.39. Table 164: IsaGraph Discrete Output Modbus Register Assignments

Register Number	Data Description
Base + 0	IsaGraph Discrete Output #1 Value
Base + 1	IsaGraph Discrete Output #2 Value
Base + 2	IsaGraph Discrete Output #3 Value
Base + 3	IsaGraph Discrete Output #4 Value
Base + 4	IsaGraph Discrete Output #5 Value
Base + 5	IsaGraph Discrete Output #6 Value
Base + 6	IsaGraph Discrete Output #7 Value
Base + 7	IsaGraph Discrete Output #8 Value

2.40. Table 165: IsaGraph Analog Output Modbus Register Assignments

Register Number	Data Description
Base + 0	IsaGraph Analog Output #1 Value

Register Number	Data Description
Base + 1	IsaGraph Analog Output #2 Value
Base + 2	IsaGraph Analog Output #3 Value
Base + 3	IsaGraph Analog Output #4 Value
Base + 4	IsaGraph Analog Output #5 Value
Base + 5	IsaGraph Analog Output #6 Value
Base + 6	IsaGraph Analog Output #7 Value
Base + 7	IsaGraph Analog Output #8 Value

2.41. Table 192: Meter Run Historical Data Current Record Indices Modbus Register Assignments

Register Number	Data Description
Base + 0	DP Flow Calculation #1 Daily History Current Record Index
Base + 1	DP Flow Calculation #1 Periodic History Current Record Index
Base + 2	DP Flow Calculation #2 Daily History Current Record Index
Base + 3	DP Flow Calculation #2 Periodic History Current Record Index
Base + 4	DP Flow Calculation #3 Daily History Current Record Index
Base + 5	DP Flow Calculation #3 Periodic History Current Record Index
Base + 6	DP Flow Calculation #4 Daily History Current Record Index
Base + 7	DP Flow Calculation #4 Periodic History Current Record Index
Base + 8	DP Flow Calculation #5 Daily History Current Record Index
Base + 9	DP Flow Calculation #5 Periodic History Current Record Index

Table 192: Meter Run Historical Data Current Record Indices Modbus Register Assignments

Register Number	Data Description
Base + 10	DP Flow Calculation #6 Daily History Current Record Index
Base + 11	DP Flow Calculation #6 Periodic History Current Record Index
Base + 12	DP Flow Calculation #7 Daily History Current Record Index
Base + 13	DP Flow Calculation #7 Periodic History Current Record Index
Base + 14	DP Flow Calculation #8 Daily History Current Record Index
Base + 15	DP Flow Calculation #8 Periodic History Current Record Index
Base + 16	DP Flow Calculation #9 Daily History Current Record Index
Base + 17	DP Flow Calculation #9 Periodic History Current Record Index
Base + 18	DP Flow Calculation #10 Daily History Current Record Index
Base + 19	DP Flow Calculation #10 Periodic History Current Record Index
Base + 20	DP Flow Calculation #11 Daily History Current Record Index
Base + 21	DP Flow Calculation #11 Periodic History Current Record Index
Base + 22	DP Flow Calculation #12 Daily History Current Record Index
Base + 23	DP Flow Calculation #12 Periodic History Current Record Index
Base + 24	Turb/Ult Flow Calculation #1 Daily History Current Record Index
Base + 25	Turb/Ult Flow Calculation #1 Periodic History Current Record Index
Base + 26	Turb/Ult Flow Calculation #2 Daily History Current Record Index
Base + 27	Turb/Ult Flow Calculation #2 Periodic History Current Record Index
Base + 28	Turb/Ult Flow Calculation #3 Daily History Current Record Index
Base + 29	Turb/Ult Flow Calculation #3 Periodic History Current Record Index
Base + 30	Turb/Ult Flow Calculation #4 Daily History Current Record Index
Base + 31	Turb/Ult Flow Calculation #4 Periodic History Current Record Index
Base + 32	Turb/Ult Flow Calculation #5 Daily History Current Record Index
Base + 33	Turb/Ult Flow Calculation #5 Periodic History Current Record Index
Base + 34	Turb/Ult Flow Calculation #6 Daily History Current Record Index
Base + 35	Turb/Ult Flow Calculation #6 Periodic History Current Record Index
Base + 36	Turb/Ult Flow Calculation #7 Daily History Current Record Index
Base + 37	Turb/Ult Flow Calculation #7 Periodic History Current Record Index
Base + 38	Turb/Ult Flow Calculation #8 Daily History Current Record Index
Base + 39	Turb/Ult Flow Calculation #8 Periodic History Current Record Index
Base + 40	Turb/Ult Flow Calculation #9 Daily History Current Record Index
Base + 41	Turb/Ult Flow Calculation #9 Periodic History Current Record Index
Base + 42	Turb/Ult Flow Calculation #10 Daily History Current Record Index
Base + 43	Turb/Ult Flow Calculation #10 Periodic History Current Record Index
Base + 44	Turb/Ult Flow Calculation #11 Daily History Current Record Index
Base + 45	Turb/Ult Flow Calculation #11 Periodic History Current Record Index
Base + 46	Turb/Ult Flow Calculation #12 Daily History Current Record Index
Base + 47	Turb/Ult Flow Calculation #12 Periodic History Current Record Index

Register Number	Data Description
Base + 48	Number of DP/Turb/Ult Daily Records
Base + 49	Number of DP/Turb/Ult Periodic Records
Base + 50	Plunger Lift Calculation #1 Minute History Current Record Index
Base + 51	Plunger Lift Calculation #1 Cycle History Current Record Index
Base + 52	Plunger Lift Calculation #2 Minute History Current Record Index
Base + 53	Plunger Lift Calculation #2 Cycle History Current Record Index
Base + 54	Plunger Lift Calculation #3 Minute History Current Record Index
Base + 55	Plunger Lift Calculation #3 Cycle History Current Record Index
Base + 56	Plunger Lift Calculation #4 Minute History Current Record Index
Base + 57	Plunger Lift Calculation #4 Cycle History Current Record Index
Base + 58	Plunger Lift Calculation #5 Minute History Current Record Index
Base + 59	Plunger Lift Calculation #5 Cycle History Current Record Index
Base + 60	Plunger Lift Number of Minute History Records
Base + 61	Plunger Lift Number of Cycle History Records
Base + 62	Spare History Calculation #1 Current Record Index
Base + 63	Spare History Calculation #2 Current Record Index
Base + 64	Spare History Calculation #3 Current Record Index
Base + 65	Spare History Calculation #4 Current Record Index
Base + 66	Spare History Calculation #5 Current Record Index
Base + 67	Spare History Calculation #6 Current Record Index
Base + 68	Spare History Calculation #7 Current Record Index
Base + 69	Spare History Calculation #8 Current Record Index
Base + 70	Spare History Number of History Records

Table 193: Events Modbus Register Assignments

Register Number	Data Description
Base + 0	Host Port - Number of Unack Audits/Alarms
Base + 1	Expansion Comm Port #1 – Number of Unack Audits/Alarms
Base + 2	Expansion Comm Port #2 – Number of Unack Audits/Alarms
Base + 3	Expansion Comm Port #3 – Number of Unack Audits/Alarms
Base + 4	Expansion Comm Port #4 – Number of Unack Audits/Alarms
Base + 5	Expansion Comm Port #5 – Number of Unack Audits/Alarms
Base + 6	Expansion Comm Port #6 – Number of Unack Audits/Alarms
Base + 7	Expansion Comm Port #7 – Number of Unack Audits/Alarms
Base + 8	Expansion Comm Port #8 – Number of Unack Audits/Alarms
Base + 9	Ethernet Port #1 – Number of Unack Audits/Alarms
Base + 10	Ethernet Port #2 – Number of Unack Audits/Alarms
Base + 11	Audit/Alarm Current Record Index
Base + 12	Audit/Alarm Number of Records

2.42. Table 229: Liquid Run Historical Data Current Record Indices Modbus Register Assignments

Register Number	Data Description
Base + 0	Liquid Flow Calculation #1 Batch History Current Record Index
Base + 1	Liquid Flow Calculation #1 Prover History Current Record Index
Base + 2	Liquid Flow Calculation #1 Results History Current Record Index
Base + 3	Liquid Flow Calculation #1 Daily History Current Record Index
Base + 4	Liquid Flow Calculation #1 Hourly History Current Record Index
Base + 5	Liquid Flow Calculation #2 Batch History Current Record Index
Base + 6	Liquid Flow Calculation #2 Prover History Current Record Index
Base + 7	Liquid Flow Calculation #2 Results History Current Record Index
Base + 8	Liquid Flow Calculation #2 Daily History Current Record Index
Base + 9	Liquid Flow Calculation #2 Hourly History Current Record Index
Base + 10	Liquid Flow Calculation #3 Batch History Current Record Index
Base + 11	Liquid Flow Calculation #3 Prover History Current Record Index
Base + 12	Liquid Flow Calculation #3 Results History Current Record Index
Base + 13	Liquid Flow Calculation #3 Daily History Current Record Index
Base + 14	Liquid Flow Calculation #3 Hourly History Current Record Index
Base + 15	Liquid Flow Calculation #4 Batch History Current Record Index
Base + 16	Liquid Flow Calculation #4 Prover History Current Record Index
Base + 17	Liquid Flow Calculation #4 Results History Current Record Index
Base + 18	Liquid Flow Calculation #4 Daily History Current Record Index

Table 229: Liquid Run Historical Data Current Record Indices Modbus Register Assignments

Register Number	Data Description
Base + 19	Liquid Flow Calculation #4 Hourly History Current Record Index
Base + 20	Liquid Flow Calculation #5 Batch History Current Record Index
Base + 21	Liquid Flow Calculation #5 Prover History Current Record Index
Base + 22	Liquid Flow Calculation #5 Results History Current Record Index
Base + 23	Liquid Flow Calculation #5 Daily History Current Record Index
Base + 24	Liquid Flow Calculation #5 Hourly History Current Record Index
Base + 25	Liquid Flow Calculation #6 Batch History Current Record Index
Base + 26	Liquid Flow Calculation #6 Prover History Current Record Index
Base + 27	Liquid Flow Calculation #6 Results History Current Record Index
Base + 28	Liquid Flow Calculation #6 Daily History Current Record Index
Base + 29	Liquid Flow Calculation #6 Hourly History Current Record Index
Base + 30	Liquid Flow Calculation #7 Batch History Current Record Index
Base + 31	Liquid Flow Calculation #7 Prover History Current Record Index
Base + 32	Liquid Flow Calculation #7 Results History Current Record Index
Base + 33	Liquid Flow Calculation #7 Daily History Current Record Index
Base + 34	Liquid Flow Calculation #7 Hourly History Current Record Index
Base + 35	Liquid Flow Calculation #8 Batch History Current Record Index
Base + 36	Liquid Flow Calculation #8 Prover History Current Record Index
Base + 37	Liquid Flow Calculation #8 Results History Current Record Index
Base + 38	Liquid Flow Calculation #8 Daily History Current Record Index
Base + 39	Liquid Flow Calculation #8 Hourly History Current Record Index
Base + 40	Liquid Flow Calculation #9 Batch History Current Record Index
Base + 41	Liquid Flow Calculation #9 Prover History Current Record Index
Base + 42	Liquid Flow Calculation #9 Results History Current Record Index
Base + 43	Liquid Flow Calculation #9 Daily History Current Record Index
Base + 44	Liquid Flow Calculation #9 Hourly History Current Record Index
Base + 45	Liquid Flow Calculation #10 Batch History Current Record Index
Base + 46	Liquid Flow Calculation #10 Prover History Current Record Index
Base + 47	Liquid Flow Calculation #10 Results History Current Record Index
Base + 48	Liquid Flow Calculation #10 Daily History Current Record Index
Base + 49	Liquid Flow Calculation #10 Hourly History Current Record Index
Base + 50	Liquid Flow Calculation #11 Batch History Current Record Index
Base + 51	Liquid Flow Calculation #11 Prover History Current Record Index
Base + 52	Liquid Flow Calculation #11 Results History Current Record Index
Base + 53	Liquid Flow Calculation #11 Daily History Current Record Index
Base + 54	Liquid Flow Calculation #11 Hourly History Current Record Index
Base + 55	Liquid Flow Calculation #12 Batch History Current Record Index
Base + 56	Liquid Flow Calculation #12 Prover History Current Record Index

Register Number	Data Description
Base + 57	Liquid Flow Calculation #12 Results History Current Record Index
Base + 58	Liquid Flow Calculation #12 Daily History Current Record Index
Base + 59	Liquid Flow Calculation #12 Hourly History Current Record Index
Base + 60	Liquid Flow Calculation Number of Batch History Records
Base + 61	Liquid Flow Calculation Number of Prover History Records
Base + 62	Liquid Flow Calculation Number of Results History Records
Base + 63	Liquid Flow Calculation Number of Daily History Records
Base + 64	Liquid Flow Calculation Number of Hourly History Records

2.43. Differential Pressure Flow Calculation History Record Format

Record Item	Data Description
1	Record Date
2	Record Time
3	Accumulated Volume
4	Accumulated Energy
5	Average Differential Pressure
6	Average Static Pressure
7	Average Temperature
8	Average Square Root Extension
9	Flow Time
10	Average Gravity
11	Average BTU Content
12	Average Carbon Dioxide Content
13	Average Nitrogen Content

2.44. Turbine/Ultrasonic Flow Calculation History Record Format

Record Item	Data Description
1	Record Date
2	Record Time
3	Accumulated Volume
4	Accumulated Energy
5	Accumulated Pulses
6	Average Static Pressure
7	Average Temperature
8	Accumulated Actual Volume
9	Flow Time
10	Average Gravity
11	Average BTU Content

Record Item	Data Description
12	Average Carbon Dioxide Content
13	Average Nitrogen Content

2.45. Chromatograph History Record Format

Record Item	Data Description
1	Record Date
2	Record Time
3	Average BTU
4	Average Specific Gravity
5	Average Methane
6	Average Nitrogen
7	Average Carbon Dioxide
8	Average Ethane
9	Average Propane
10	Average Water
11	Average Hydrogen Sulfide
12	Average Hydrogen
13	Average Carbon Monoxide
14	Average Oxygen
15	Average I-Butane
16	Average N-Butane
17	Average I-Pentane
18	Average N-Pentane
19	Average C6+
20	Average Hexane
21	Average Heptane
22	Average Octane
23	Average Nonane
24	Average Decane
25	Average Helium
26	Average Argon
27	Average Air
28	Average Neo-Pentane