

Plant: **Prairie Island 2**
Orientation: **Axial**

Material: **SA508CL3**
Capsule: **N**

Heat: **22642**
Fluence: **8.41E+019 n/cm²**

Capsule N Lower Shell Forging D (Axial) Charpy V-Notch Data

Temperature (° F)	Input %Shear	Computed %Shear	Differential
100	5.0	2.3	2.72
120	10.0	4.5	5.49
140	10.0	8.7	1.30
155	15.0	13.9	1.10
165	20.0	18.7	1.34
170	20.0	21.5	-1.47
175	30.0	24.6	5.42
200	35.0	44.0	-8.95
225	65.0	65.4	-0.36
275	100.0	91.6	8.38
300	100.0	96.3	3.66
325	100.0	98.4	1.56

Unirradiated Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/24/2022 4:40 PM

A = 52.75 B = 50.55 C = 78.93 T0 = -37.84 D = 0.00

Correlation Coefficient = 0.966

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf Energy = 103.30 (Fixed)

Lower Shelf Energy = 2.20 (Fixed)

Temp@30 ft-lbs=-76.10° F

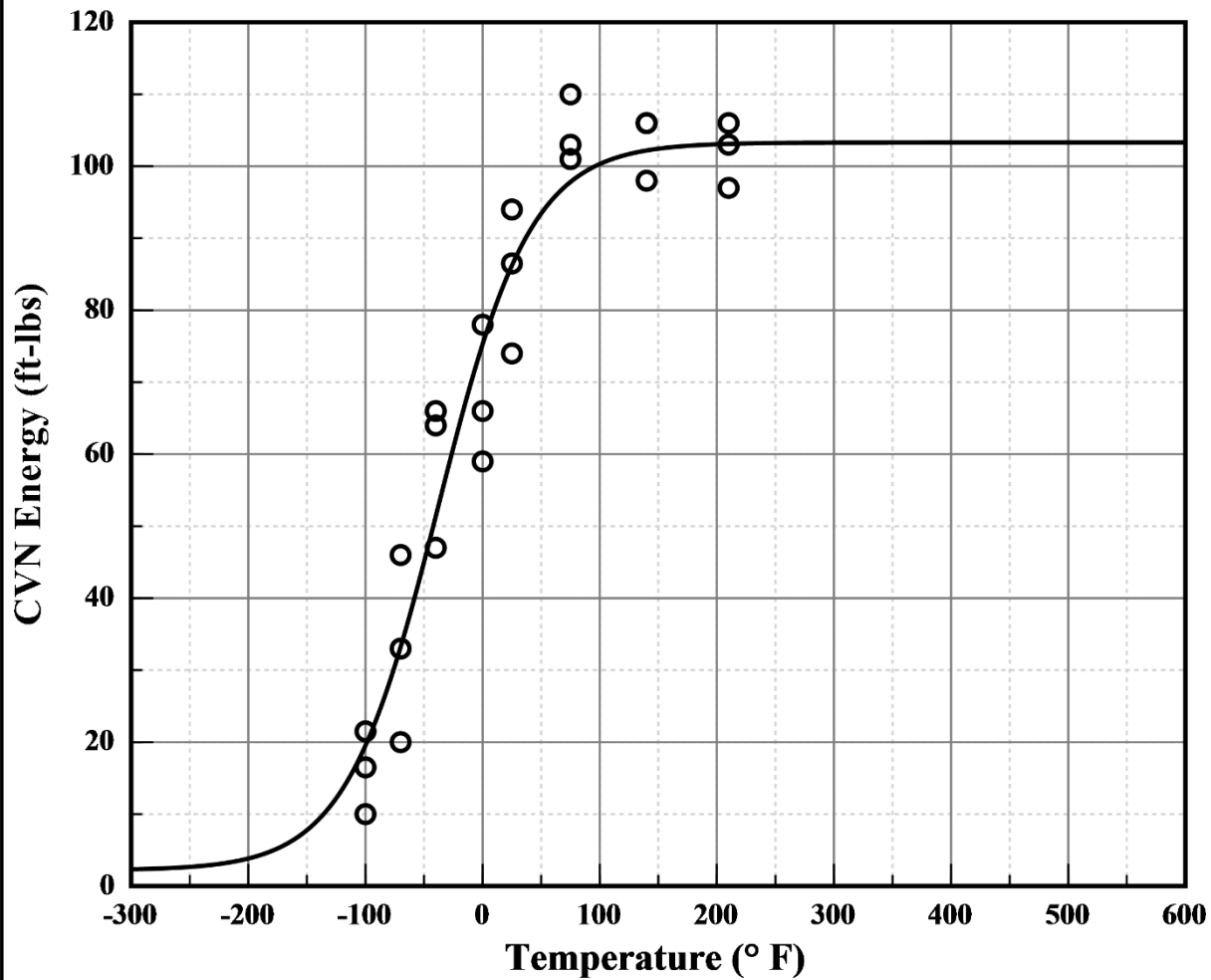
Temp@35 ft-lbs=-66.70° F

Temp@50 ft-lbs=-42.10° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **Unirrad**

Heat: **2721**
Fluence: **0.00E+000 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: **Unirrad**

Heat: **2721**
Fluence: **0.00E+000 n/cm²**

Unirradiated Weld Metal Charpy V-Notch Data

Temperature (° F)	Input CVN	Computed CVN	Differential
-100	16.5	19.5	-3.04
-100	21.5	19.5	1.96
-100	10.0	19.5	-9.54
-70	46.0	33.2	12.78
-70	33.0	33.2	-0.22
-70	20.0	33.2	-13.22
-40	64.0	51.4	12.63
-40	47.0	51.4	-4.37
-40	66.0	51.4	14.63
0	78.0	75.3	2.72
0	66.0	75.3	-9.28
0	59.0	75.3	-16.28
25	86.5	86.2	0.29
25	94.0	86.2	7.79
25	74.0	86.2	-12.21
75	110.0	97.8	12.18
75	101.0	97.8	3.18
75	103.0	97.8	5.18
140	106.0	102.2	3.80
140	98.0	102.2	-4.20
140	106.0	102.2	3.80
210	106.0	103.1	2.89
210	103.0	103.1	-0.11
210	97.0	103.1	-6.11

Capsule V Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/25/2022 8:03 AM

A = 49.70 B = 47.50 C = 54.17 T0 = 17.04 D = 0.00

Correlation Coefficient = 0.993

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf Energy = 97.20 (Fixed)

Lower Shelf Energy = 2.20 (Fixed)

Temp@30 ft-lbs= -6.80° F

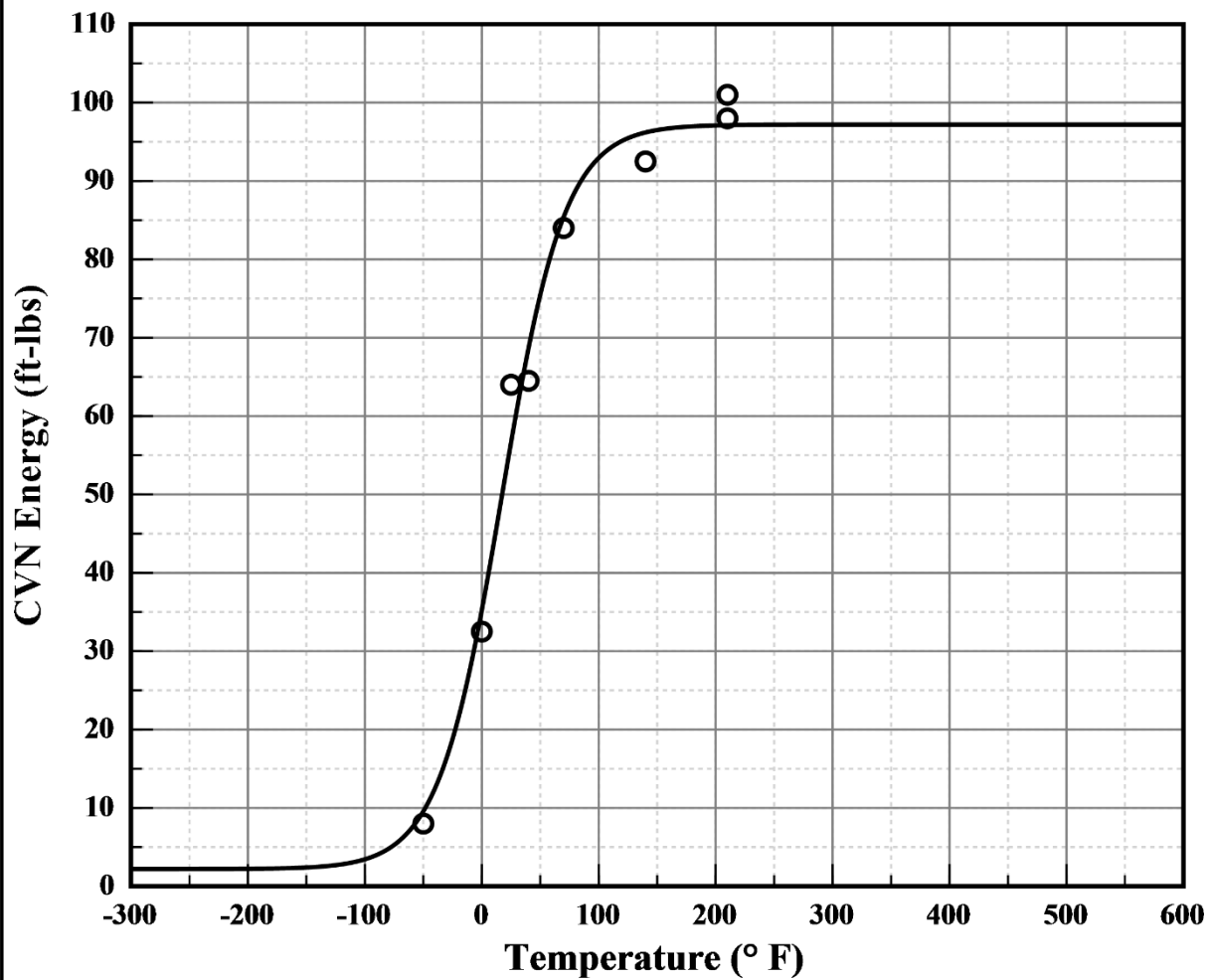
Temp@35 ft-lbs= -0.20° F

Temp@50 ft-lbs= 17.40° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **V**

Heat: **2721**
Fluence: **5.98E+018 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: V

Heat: **2721**
Fluence: **5.98E+018 n/cm²**

Capsule V Weld Metal Charpy V-Notch Data

Temperature (° F)	Input CVN	Computed CVN	Differential
-50	8.0	9.6	-1.57
0	32.5	35.2	-2.73
25	64.0	56.6	7.37
40	64.5	68.7	-4.21
70	84.0	85.4	-1.42
140	92.5	96.2	-3.70
210	101.0	97.1	3.88
210	98.0	97.1	0.88

Capsule T Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/25/2022 10:07 AM

A = 48.50 B = 46.30 C = 76.92 T0 = 14.13 D = 0.00

Correlation Coefficient = 0.979

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf Energy = 94.80 (Fixed)

Lower Shelf Energy = 2.20 (Fixed)

Temp@30 ft-lbs=-18.40° F

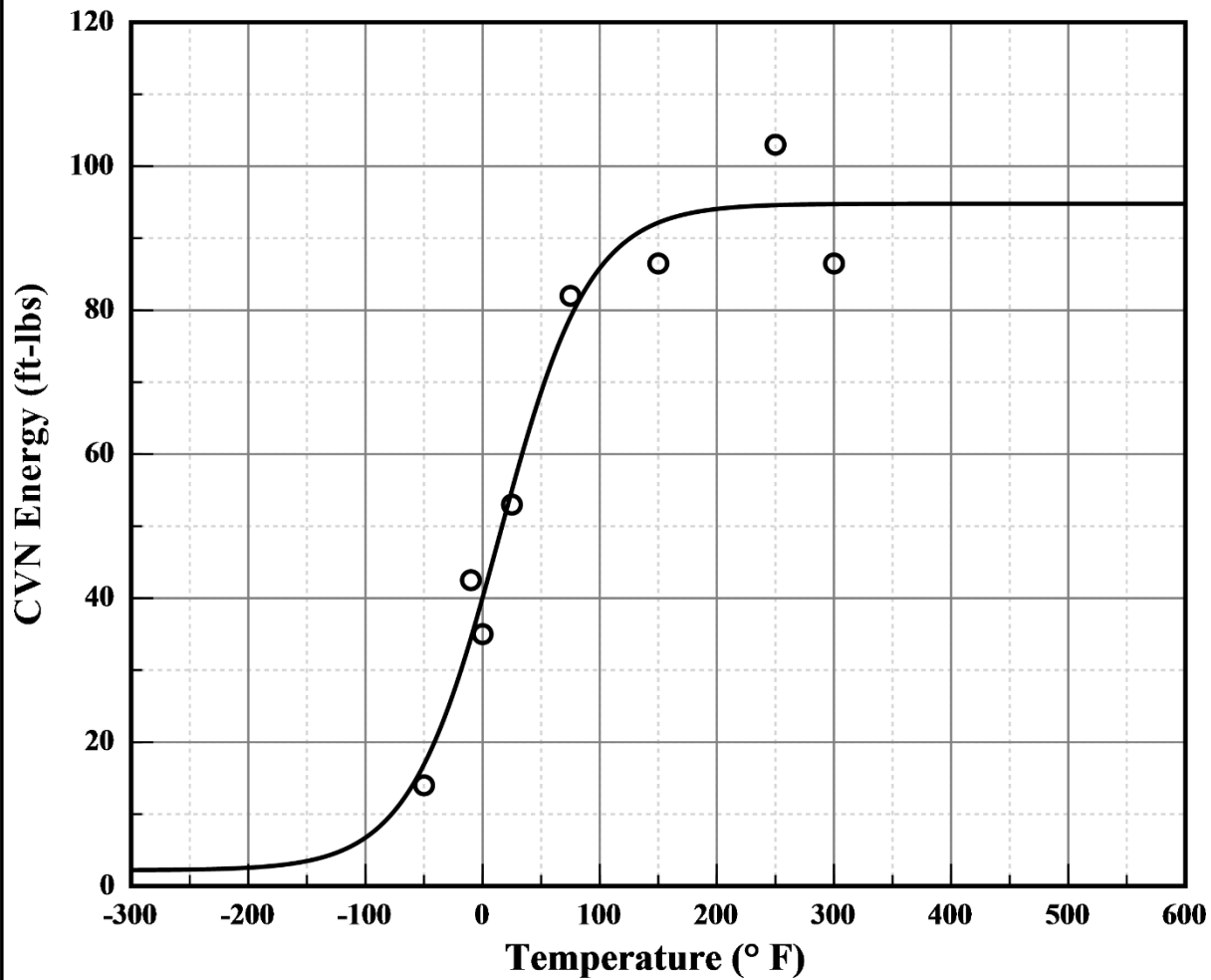
Temp@35 ft-lbs= -8.90° F

Temp@50 ft-lbs= 16.70° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **T**

Heat: **2721**
Fluence: **1.10E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: T

Heat: **2721**
Fluence: **1.10E+019 n/cm²**

Capsule T Weld Metal Charpy V-Notch Data

Temperature (° F)	Input CVN	Computed CVN	Differential
-50	14.0	16.9	-2.90
-10	42.5	34.4	8.07
0	35.0	40.1	-5.09
25	53.0	55.0	-2.00
75	82.0	79.0	2.98
150	86.5	92.2	-5.67
250	103.0	94.6	8.40
300	86.5	94.7	-8.25

Capsule R Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/31/2022 6:23 AM

A = 46.60 B = 44.40 C = 109.23 T0 = 67.08 D = 0.00

Correlation Coefficient = 0.991

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf Energy = 91.00 (Fixed)

Lower Shelf Energy = 2.20 (Fixed)

Temp@30 ft-lbs= 24.20° F

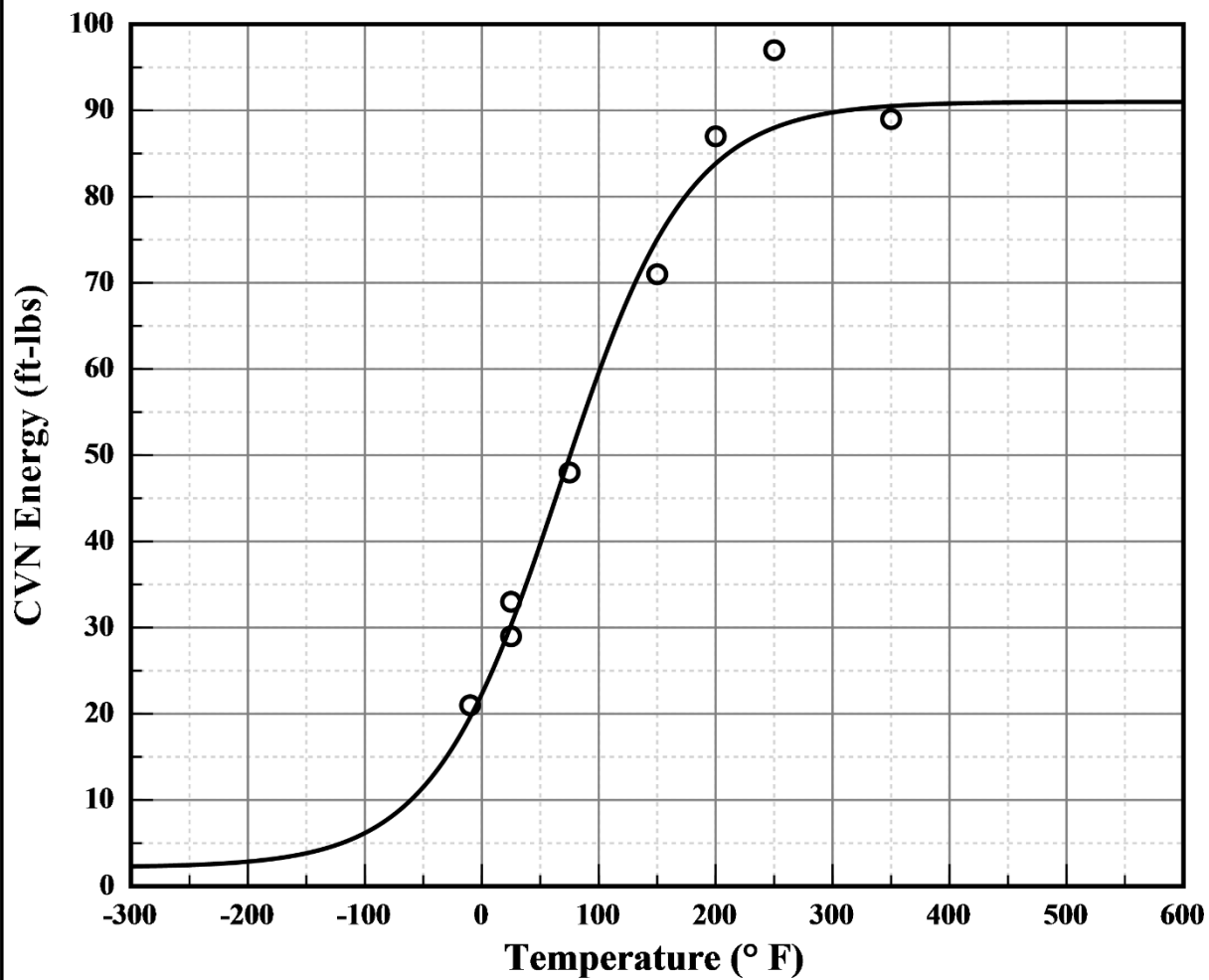
Temp@35 ft-lbs= 37.90° F

Temp@50 ft-lbs= 75.50° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **R**

Heat: **2721**
Fluence: **4.11E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: R

Heat: **2721**
Fluence: **4.11E+019 n/cm²**

Capsule R Weld Metal Charpy V-Notch Data

Temperature (° F)	Input CVN	Computed CVN	Differential
-10	21.0	19.6	1.39
25	33.0	30.3	2.71
25	29.0	30.3	-1.29
75	48.0	49.8	-1.81
150	71.0	75.0	-4.04
200	87.0	83.8	3.16
250	97.0	88.0	9.01
350	89.0	90.5	-1.50

Capsule P Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/31/2022 10:20 AM

A = 50.35 B = 48.15 C = 105.14 T0 = 67.46 D = 0.00

Correlation Coefficient = 0.996

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf Energy = 98.50 (Fixed)

Lower Shelf Energy = 2.20 (Fixed)

Temp@30 ft-lbs= 20.10° F

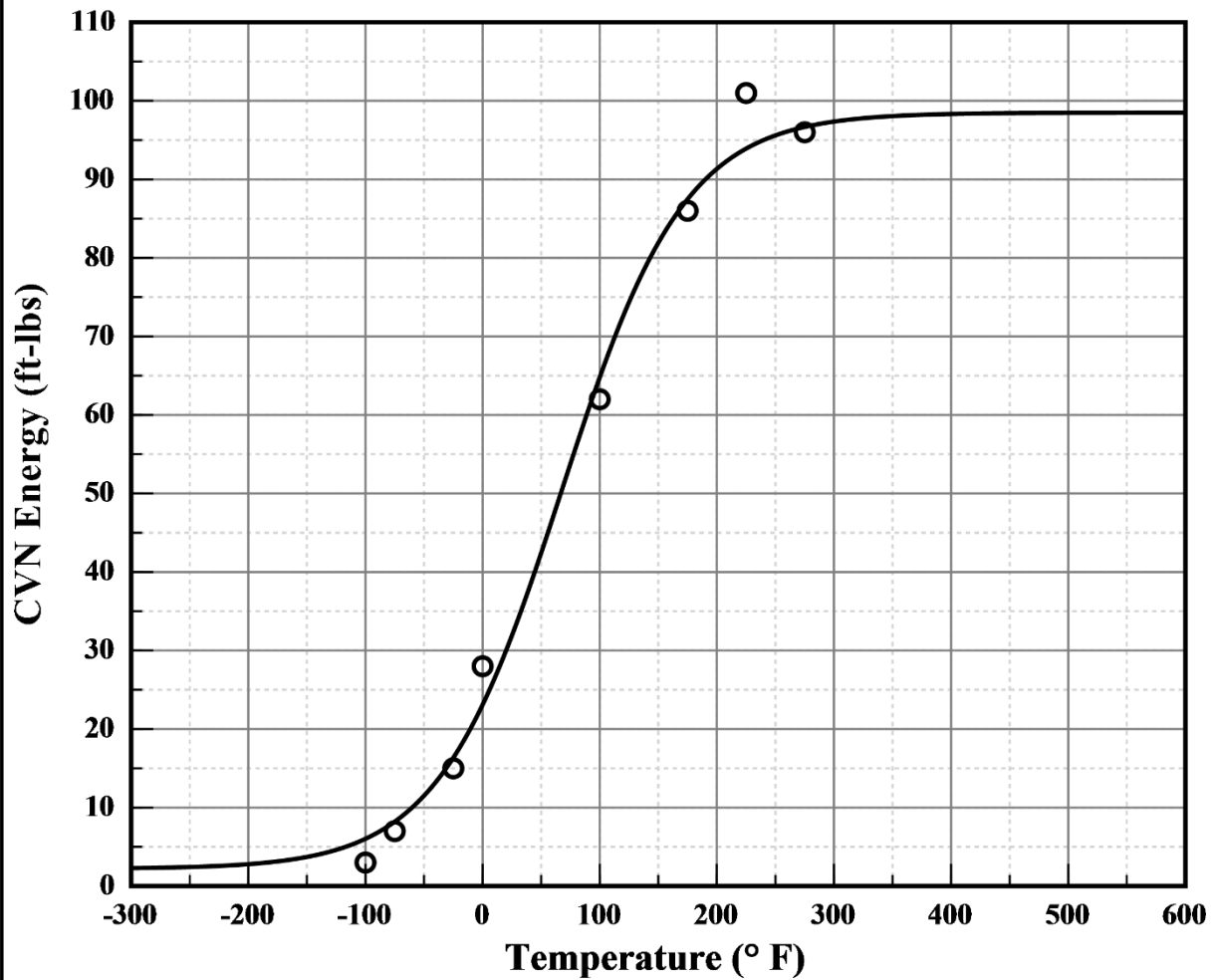
Temp@35 ft-lbs= 32.80° F

Temp@50 ft-lbs= 66.70° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **P**

Heat: **2721**
Fluence: **4.27E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: P

Heat: **2721**
Fluence: **4.27E+019 n/cm²**

Capsule P Weld Metal Charpy V-Notch Data

Temperature (° F)	Input CVN	Computed CVN	Differential
-100	3.0	6.0	-3.02
-75	7.0	8.2	-1.21
-25	15.0	16.4	-1.35
0	28.0	23.1	4.90
100	62.0	64.8	-2.80
175	86.0	87.5	-1.48
225	101.0	93.9	7.08
275	96.0	96.7	-0.68

Capsule N Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 7/12/2022 7:02 AM

A = 48.60 B = 46.40 C = 115.42 T0 = 108.51 D = 0.00

Correlation Coefficient = 0.950

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf Energy = 95.00 (Fixed)

Lower Shelf Energy = 2.20 (Fixed)

Temp@30 ft-lbs= 59.50° F

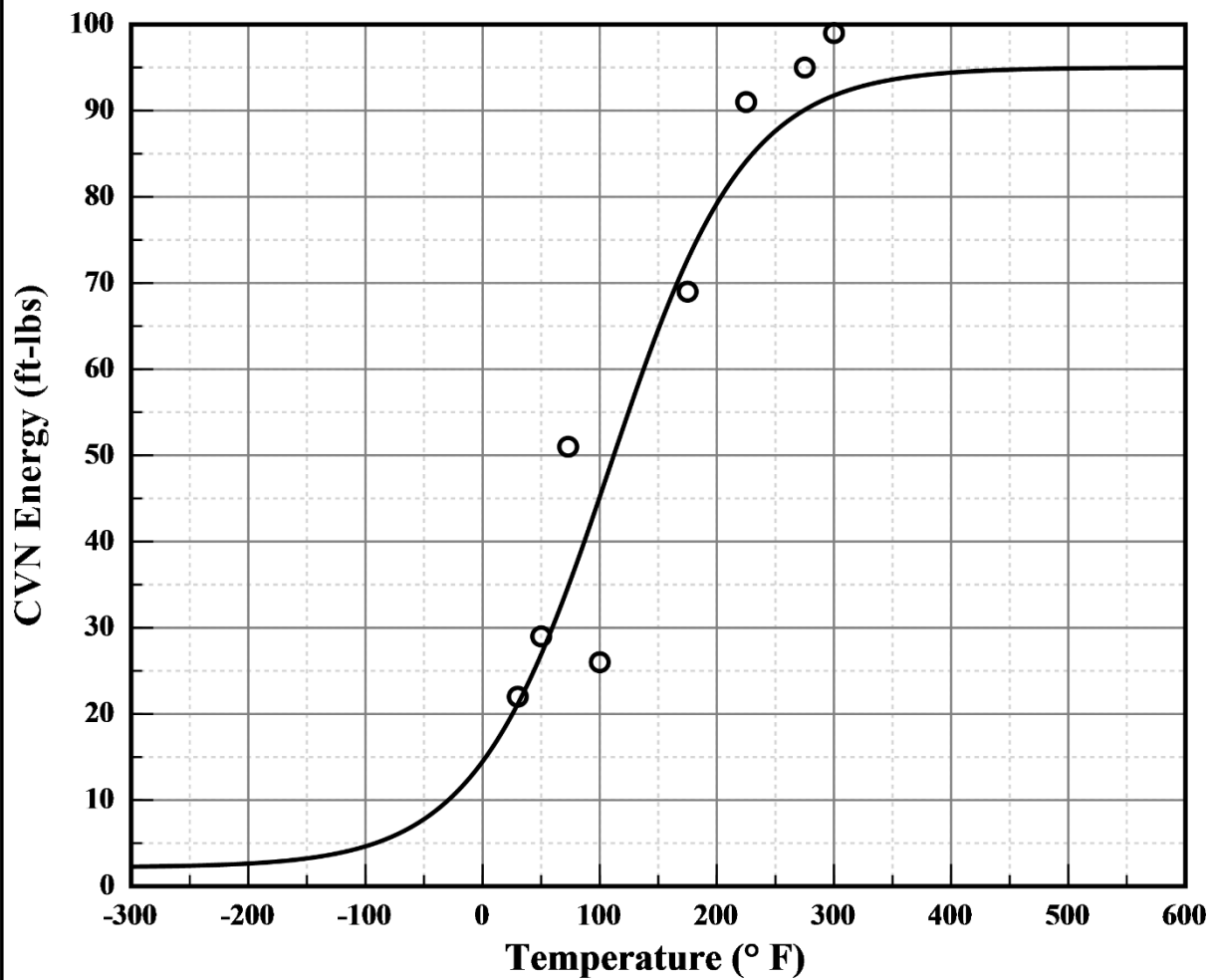
Temp@35 ft-lbs= 73.70° F

Temp@50 ft-lbs=112.00° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **N**

Heat: **2721**
Fluence: **8.41E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: N

Heat: **2721**
Fluence: **8.41E+019 n/cm²**

Capsule N Weld Metal Charpy V-Notch Data

Temperature (° F)	Input CVN	Computed CVN	Differential
30	22.0	21.1	0.85
50	29.0	26.9	2.09
73	51.0	34.8	16.24
100	26.0	45.2	-19.19
175	69.0	72.7	-3.72
225	91.0	84.1	6.88
275	95.0	90.1	4.91
300	99.0	91.8	7.24

Unirradiated Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/24/2022 4:42 PM

A = 41.12 B = 40.12 C = 75.85 T0 = -35.95 D = 0.00

Correlation Coefficient = 0.970

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

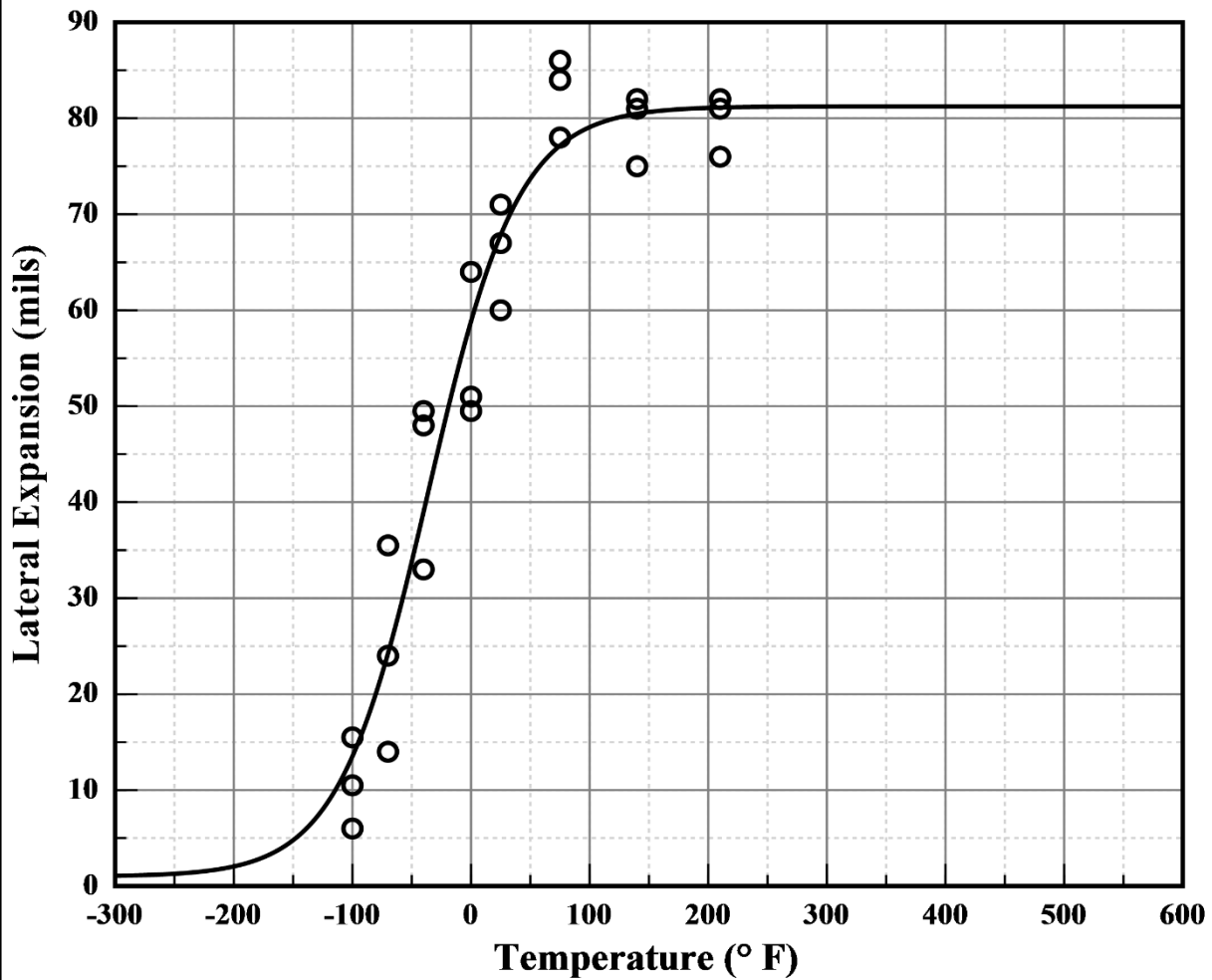
Upper Shelf L.E. = 81.24 Lower Shelf L.E. = 1.00 (Fixed)

Temp@35 mils=-47.60° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **Unirrad**

Heat: **2721**
Fluence: **0.00E+000 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: **Unirrad**

Heat: **2721**
Fluence: **0.00E+000 n/cm²**

Unirradiated Weld Metal Charpy V-Notch Data

Temperature (° F)	Input L. E.	Computed L. E.	Differential
-100	10.5	13.5	-3.01
-100	15.5	13.5	1.99
-100	6.0	13.5	-7.51
-70	35.5	24.2	11.27
-70	24.0	24.2	-0.23
-70	14.0	24.2	-10.23
-40	49.5	39.0	10.52
-40	33.0	39.0	-5.98
-40	48.0	39.0	9.02
0	64.0	58.8	5.17
0	51.0	58.8	-7.83
0	49.5	58.8	-9.33
25	67.0	67.8	-0.84
25	71.0	67.8	3.16
25	60.0	67.8	-7.84
75	78.0	77.2	0.84
75	86.0	77.2	8.84
75	84.0	77.2	6.84
140	81.0	80.5	0.52
140	75.0	80.5	-5.48
140	82.0	80.5	1.52
210	82.0	81.1	0.88
210	81.0	81.1	-0.12
210	76.0	81.1	-5.12

Capsule V Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/25/2022 8:05 AM

A = 40.17 B = 39.17 C = 64.96 T0 = 11.51 D = 0.00

Correlation Coefficient = 0.986

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

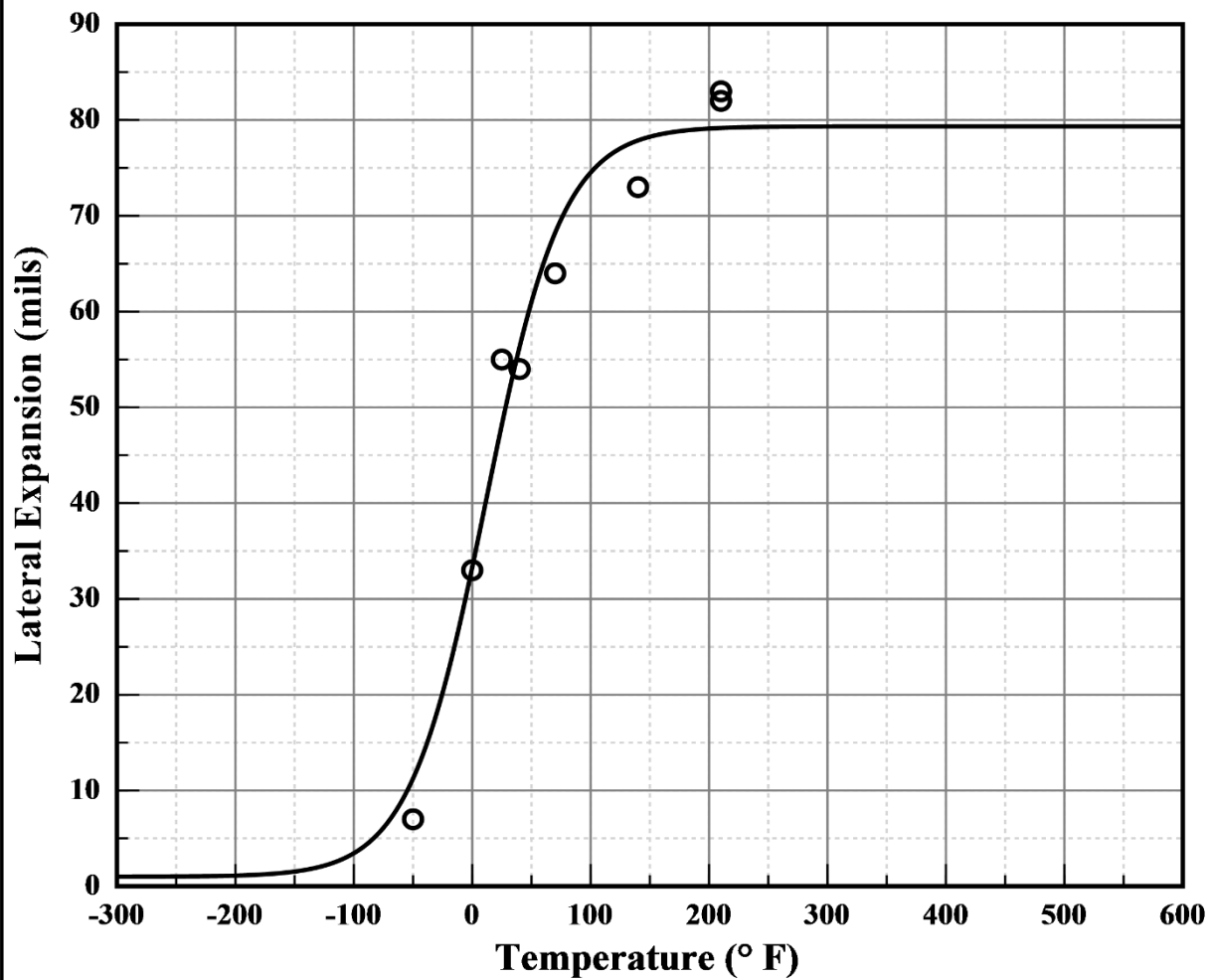
Upper Shelf L.E. = 79.34 Lower Shelf L.E. = 1.00 (Fixed)

Temp@35 mils = 2.90° F

Plant: Prairie Island 2
Orientation: NA

Material: Weld
Capsule: V

Heat: 2721
Fluence: 5.98E+018 n/cm²



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: V

Heat: **2721**
Fluence: **5.98E+018 n/cm²**

Capsule V Weld Metal Charpy V-Notch Data

Temperature (° F)	Input L. E.	Computed L. E.	Differential
-50	7.0	11.2	-4.25
0	33.0	33.3	-0.30
25	55.0	48.2	6.81
40	54.0	56.3	-2.33
70	64.0	68.2	-4.24
140	73.0	77.9	-4.87
210	82.0	79.2	2.83
210	83.0	79.2	3.83

Capsule T Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/25/2022 10:11 AM

A = 40.35 B = 39.35 C = 86.16 T0 = 13.83 D = 0.00

Correlation Coefficient = 0.987

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

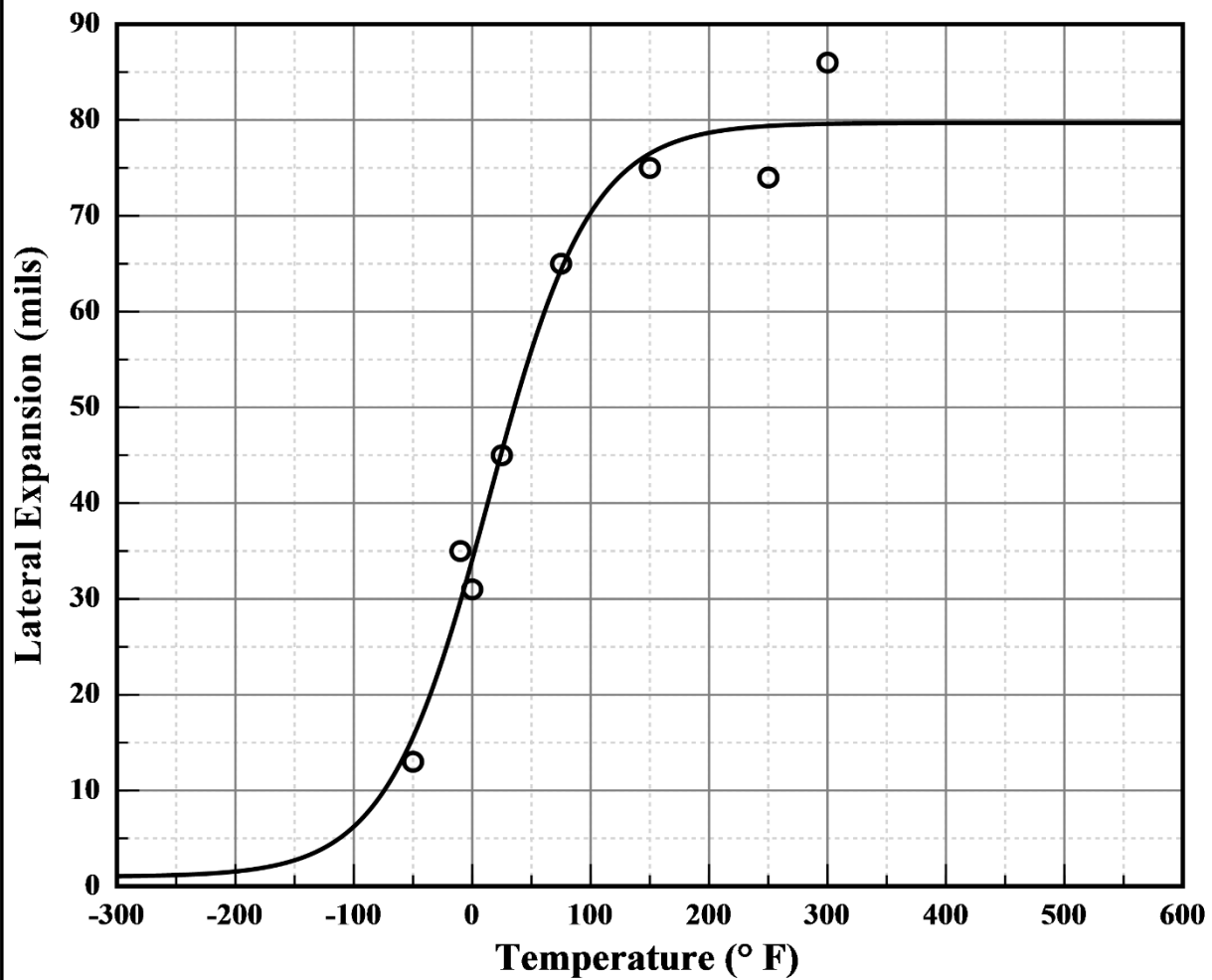
Upper Shelf L.E. = 79.70 Lower Shelf L.E. = 1.00 (Fixed)

Temp@35 mils = 2.10° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **T**

Heat: **2721**
Fluence: **1.10E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: T

Heat: **2721**
Fluence: **1.10E+019 n/cm²**

Capsule T Weld Metal Charpy V-Notch Data

Temperature (° F)	Input L. E.	Computed L. E.	Differential
-50	13.0	15.6	-2.57
-10	35.0	29.7	5.26
0	31.0	34.1	-3.09
25	45.0	45.4	-0.42
75	65.0	64.4	0.62
150	75.0	76.5	-1.50
250	74.0	79.4	-5.38
300	86.0	79.6	6.40

Capsule R Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/31/2022 6:30 AM

A = 40.66 B = 39.66 C = 136.38 T0 = 72.46 D = 0.00

Correlation Coefficient = 0.992

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

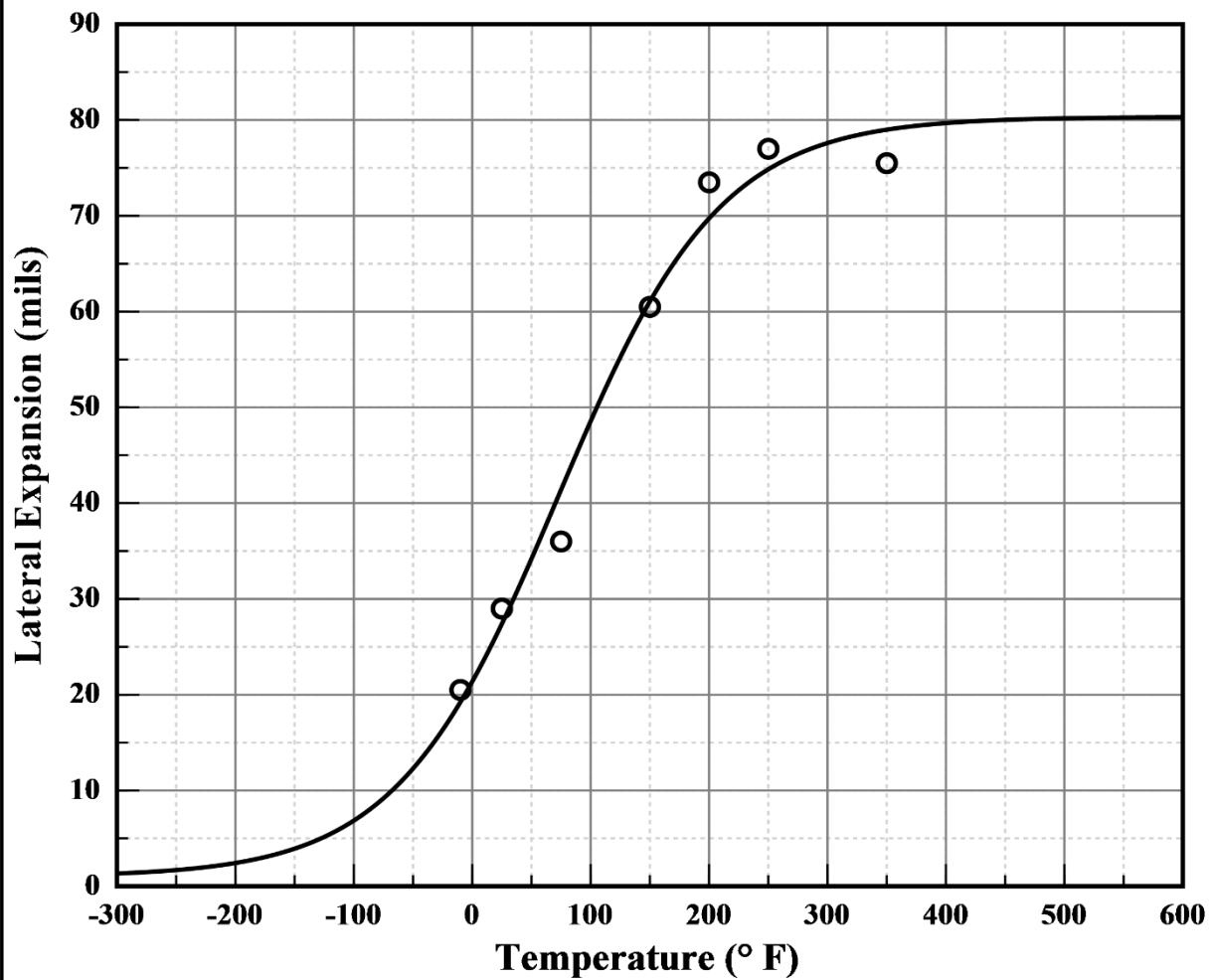
Upper Shelf L.E. = 80.33 Lower Shelf L.E. = 1.00 (Fixed)

Temp@35 mils = 52.90° F

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **R**

Heat: **2721**
Fluence: **4.11E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: R

Heat: **2721**
Fluence: **4.11E+019 n/cm²**

Capsule R Weld Metal Charpy V-Notch Data

Temperature (° F)	Input L. E.	Computed L. E.	Differential
-10	20.5	19.2	1.27
25	29.0	27.4	1.61
25	29.0	27.4	1.61
75	36.0	41.4	-5.40
150	60.5	61.1	-0.56
200	73.5	69.7	3.76
250	77.0	74.9	2.14
350	75.5	79.0	-3.50

Capsule P Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/31/2022 11:05 AM

A = 39.21 B = 38.21 C = 104.57 T0 = 64.28 D = 0.00

Correlation Coefficient = 0.995

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

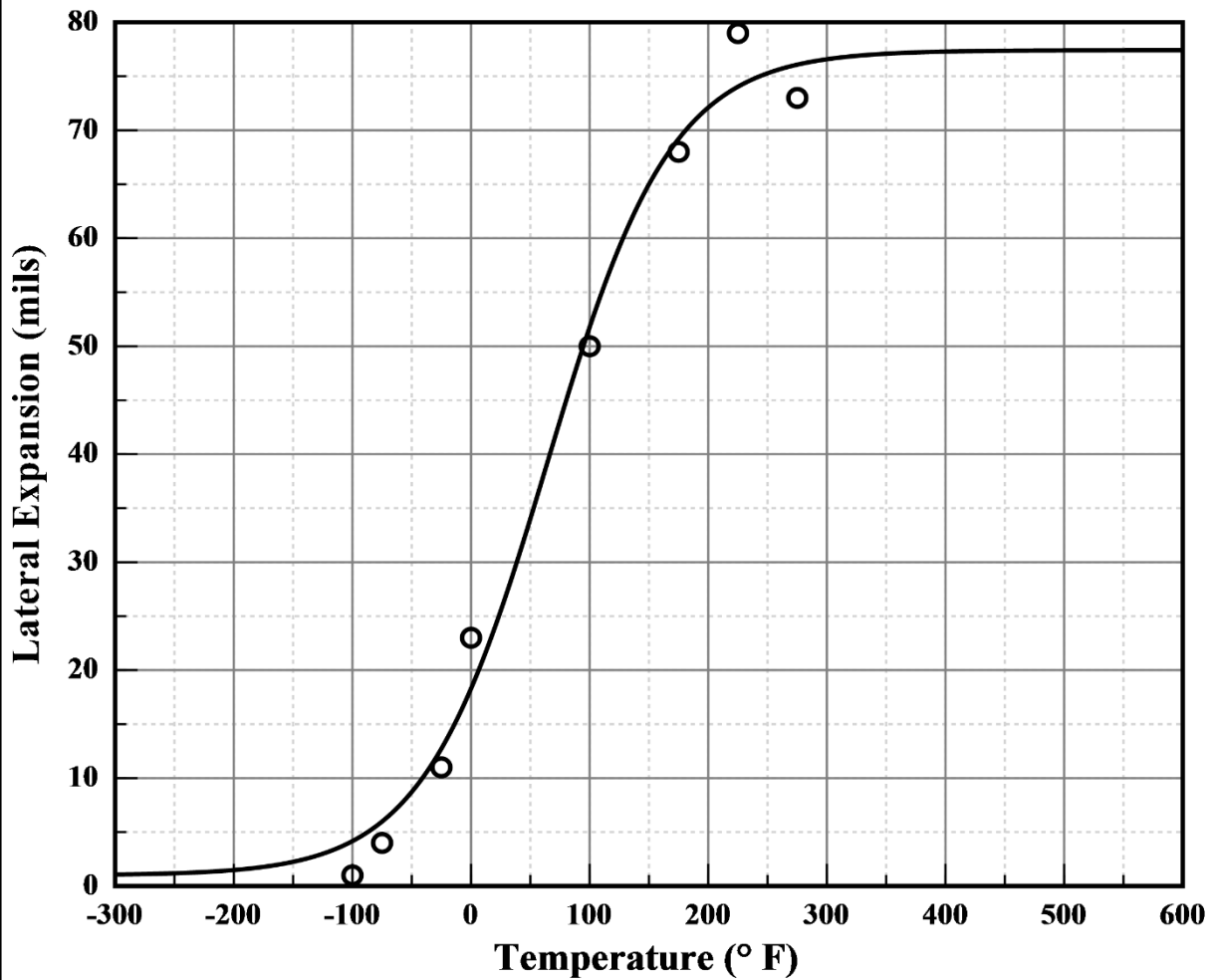
Upper Shelf L.E. = 77.42 Lower Shelf L.E. = 1.00 (Fixed)

Temp@35 mils = 52.80° F

Plant: Prairie Island 2
Orientation: NA

Material: Weld
Capsule: P

Heat: 2721
Fluence: 4.27E+019 n/cm²



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: P

Heat: **2721**
Fluence: **4.27E+019 n/cm²**

Capsule P Weld Metal Charpy V-Notch Data

Temperature (° F)	Input L. E.	Computed L. E.	Differential
-100	1.0	4.2	-3.16
-75	4.0	6.0	-1.98
-25	11.0	12.7	-1.73
0	23.0	18.3	4.71
100	50.0	51.8	-1.77
175	68.0	69.2	-1.21
225	79.0	74.0	4.96
275	73.0	76.1	-3.08

Capsule N Heat Affected Zone

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 11/8/2022 9:21 AM

A = 27.73 B = 26.73 C = 69.44 T0 = 39.29 D = 0.00

Correlation Coefficient = 0.930

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

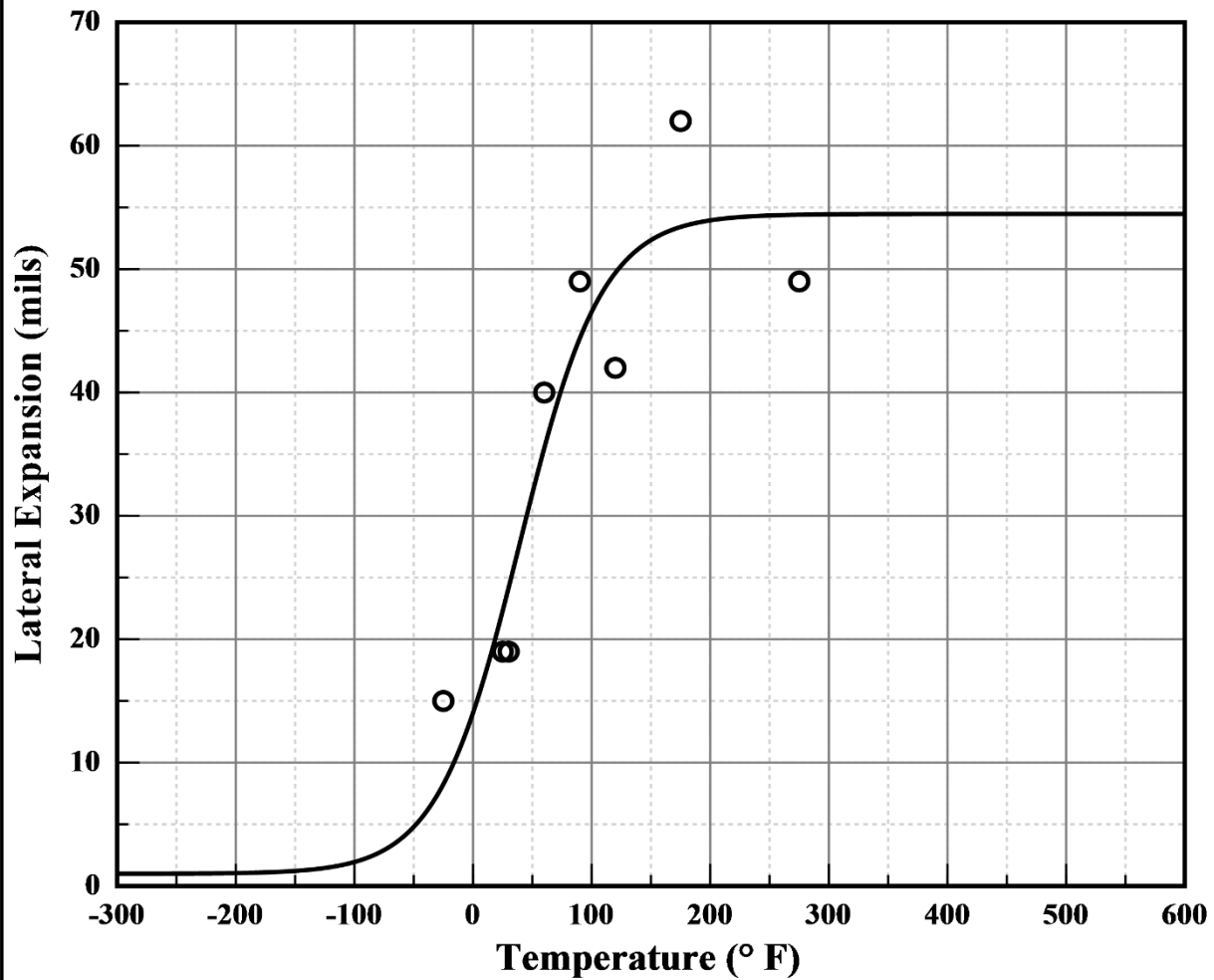
Upper Shelf L.E. = 54.47 Lower Shelf L.E. = 1.00 (Fixed)

Temp@35 mils = 58.70° F

Plant: Prairie Island 2
Orientation: NA

Material: SA508CL3
Capsule: N

Heat: 22642
Fluence: 8.41E+019 n/cm²



Plant: **Prairie Island 2**
Orientation: NA

Material: **SA508CL3**
Capsule: N

Heat: **22642**
Fluence: **8.41E+019 n/cm²**

Capsule N Heat Affected Zone Charpy V-Notch Data

Temperature (° F)	Input L. E.	Computed L. E.	Differential
-25	15.0	8.3	6.75
25	19.0	22.3	-3.31
30	19.0	24.2	-5.18
60	40.0	35.5	4.52
90	49.0	44.4	4.61
120	42.0	49.7	-7.70
175	62.0	53.4	8.58
275	49.0	54.4	-5.41

Unirradiated Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/24/2022 4:41 PM

A = 50.00 B = 50.00 C = 81.83 T0 = -51.16 D = 0.00

Correlation Coefficient = 0.977

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf %Shear = 100.00 (Fixed)

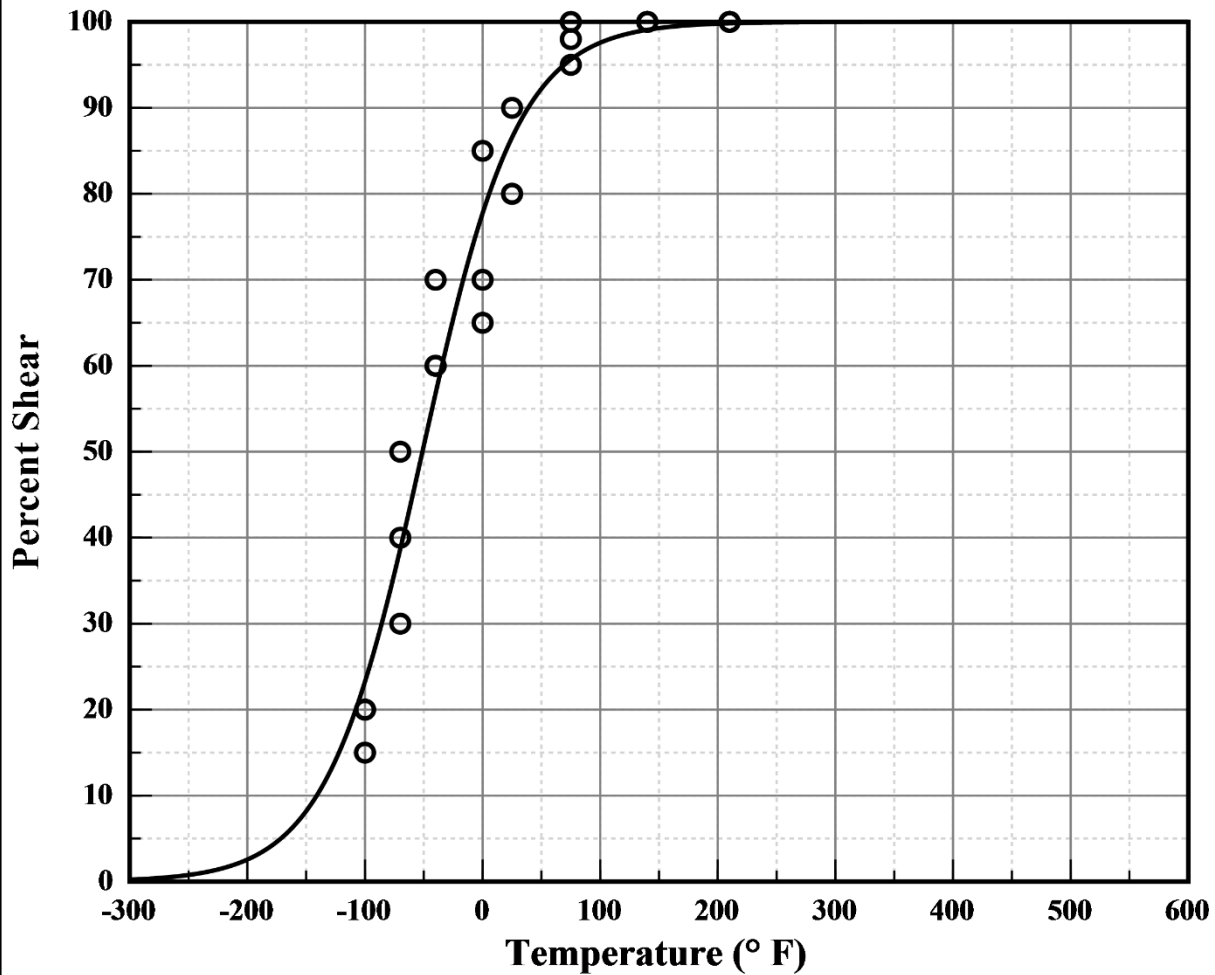
Lower Shelf %Shear = 0.00 (Fixed)

Temperature at 50% Shear = -51.10

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **Unirrad**

Heat: **2721**
Fluence: **0.00E+000 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: **Unirrad**

Heat: **2721**
Fluence: **0.00E+000 n/cm²**

Unirradiated Weld Metal Charpy V-Notch Data

Temperature (° F)	Input %Shear	Computed %Shear	Differential
-100	20.0	23.3	-3.26
-100	20.0	23.3	-3.26
-100	15.0	23.3	-8.26
-70	50.0	38.7	11.31
-70	40.0	38.7	1.31
-70	30.0	38.7	-8.69
-40	60.0	56.8	3.22
-40	60.0	56.8	3.22
-40	70.0	56.8	13.22
0	85.0	77.7	7.26
0	65.0	77.7	-12.74
0	70.0	77.7	-7.74
25	80.0	86.5	-6.55
25	90.0	86.5	3.45
25	80.0	86.5	-6.55
75	100.0	95.6	4.38
75	95.0	95.6	-0.62
75	98.0	95.6	2.38
140	100.0	99.1	0.93
140	100.0	99.1	0.93
140	100.0	99.1	0.93
210	100.0	99.8	0.17
210	100.0	99.8	0.17
210	100.0	99.8	0.17

Capsule V Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/25/2022 8:04 AM

A = 50.00 B = 50.00 C = 74.42 T0 = 43.88 D = 0.00

Correlation Coefficient = 0.986

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf %Shear = 100.00 (Fixed)

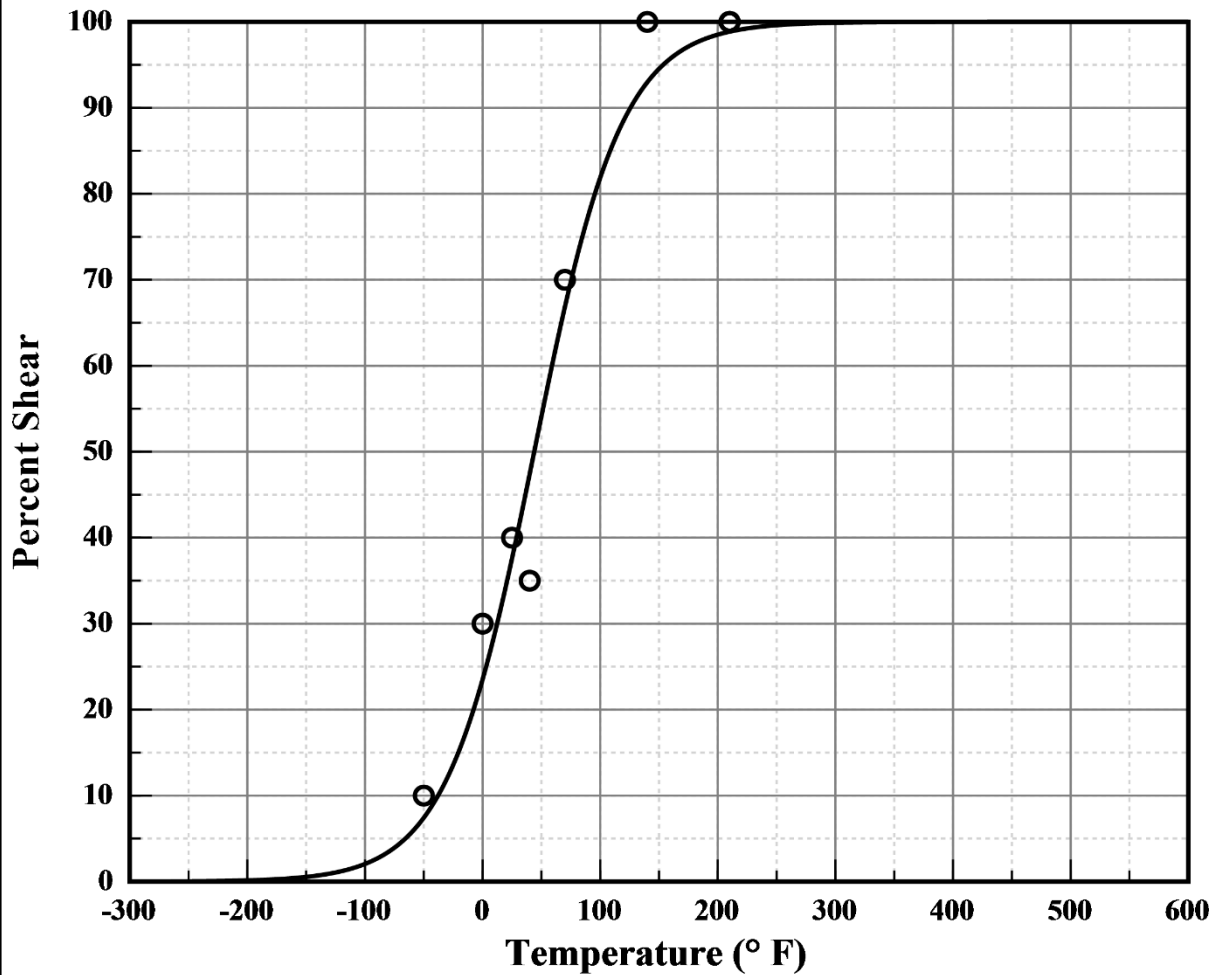
Lower Shelf %Shear = 0.00 (Fixed)

Temperature at 50% Shear = 43.90

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **V**

Heat: **2721**
Fluence: **5.98E+018 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: V

Heat: **2721**
Fluence: **5.98E+018 n/cm²**

Capsule V Weld Metal Charpy V-Notch Data

Temperature (° F)	Input %Shear	Computed %Shear	Differential
-50	10.0	7.4	2.57
0	30.0	23.5	6.48
25	40.0	37.6	2.42
40	35.0	47.4	-12.39
70	70.0	66.9	3.14
140	100.0	93.0	7.02
210	100.0	98.9	1.14
210	100.0	98.9	1.14

Capsule T Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/25/2022 10:08 AM

A = 50.00 B = 50.00 C = 70.40 T0 = 23.50 D = 0.00

Correlation Coefficient = 0.991

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf %Shear = 100.00 (Fixed)

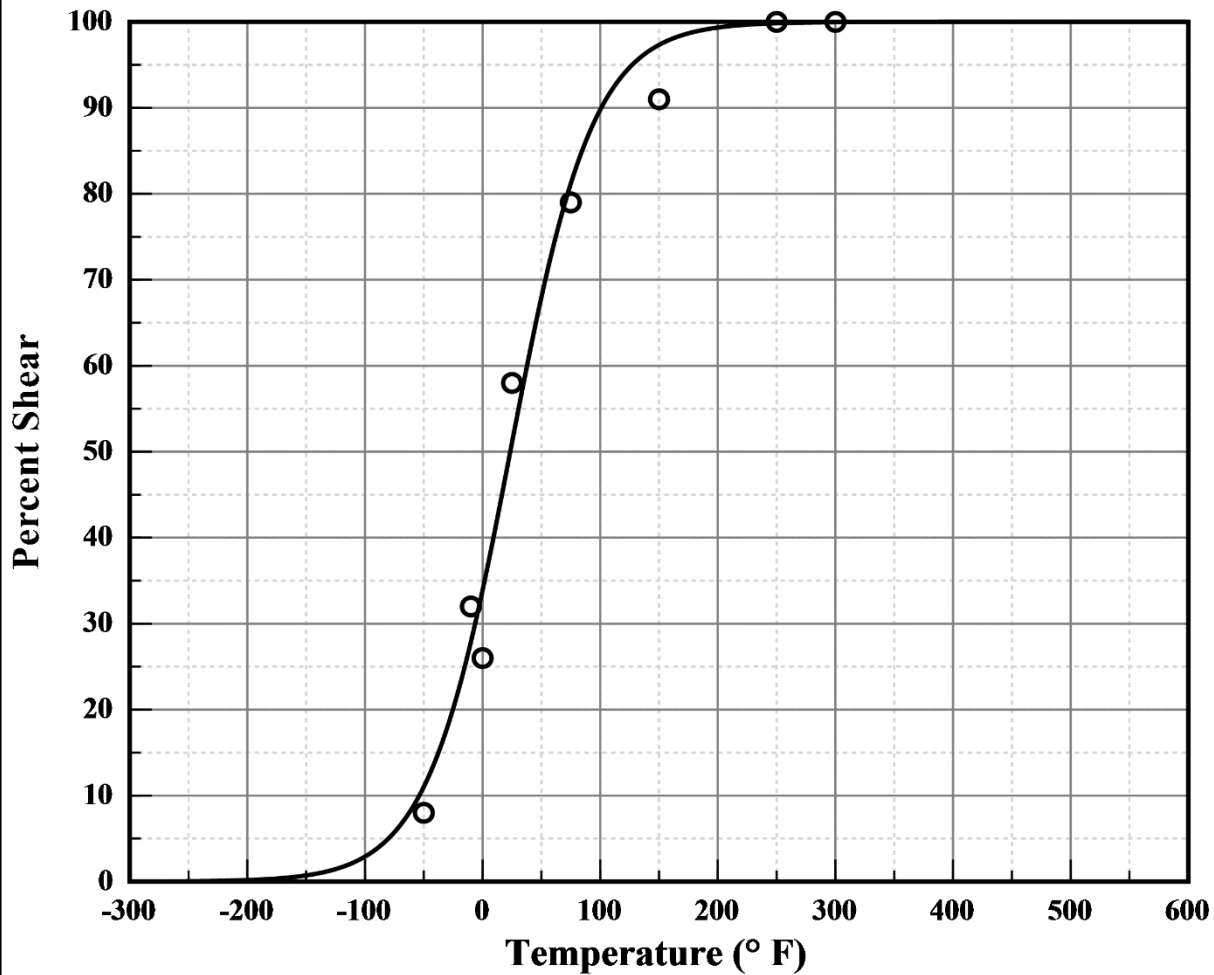
Lower Shelf %Shear = 0.00 (Fixed)

Temperature at 50% Shear = 23.60

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **T**

Heat: **2721**
Fluence: **1.10E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: T

Heat: **2721**
Fluence: **1.10E+019 n/cm²**

Capsule T Weld Metal Charpy V-Notch Data

Temperature (° F)	Input %Shear	Computed %Shear	Differential
-50	8.0	11.0	-3.02
-10	32.0	27.9	4.15
0	26.0	33.9	-7.90
25	58.0	51.1	6.94
75	79.0	81.2	-2.20
150	91.0	97.3	-6.32
250	100.0	99.8	0.16
300	100.0	100.0	0.04

Capsule R Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/31/2022 6:28 AM

A = 50.00 B = 50.00 C = 85.02 T0 = 62.59 D = 0.00

Correlation Coefficient = 0.985

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf %Shear = 100.00 (Fixed)

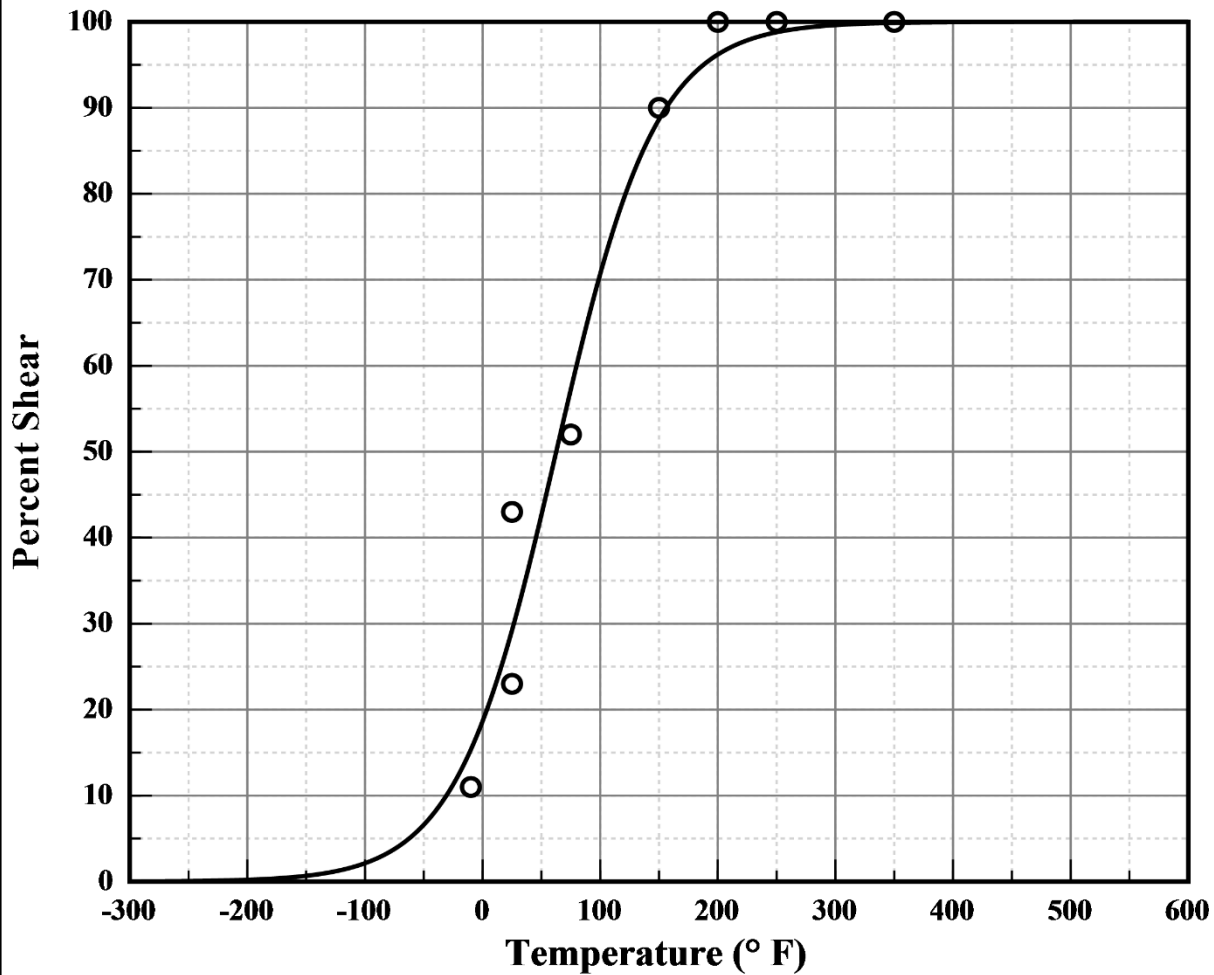
Lower Shelf %Shear = 0.00 (Fixed)

Temperature at 50% Shear = 62.60

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **R**

Heat: **2721**
Fluence: **4.11E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: R

Heat: **2721**
Fluence: **4.11E+019 n/cm²**

Capsule R Weld Metal Charpy V-Notch Data

Temperature (° F)	Input %Shear	Computed %Shear	Differential
-10	11.0	15.3	-4.35
25	43.0	29.2	13.77
25	23.0	29.2	-6.23
75	52.0	57.2	-5.25
150	90.0	88.7	1.34
200	100.0	96.2	3.80
250	100.0	98.8	1.20
350	100.0	99.9	0.12

Capsule P Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 5/31/2022 11:05 AM

A = 50.00 B = 50.00 C = 98.05 T0 = 86.82 D = 0.00

Correlation Coefficient = 0.996

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf %Shear = 100.00 (Fixed)

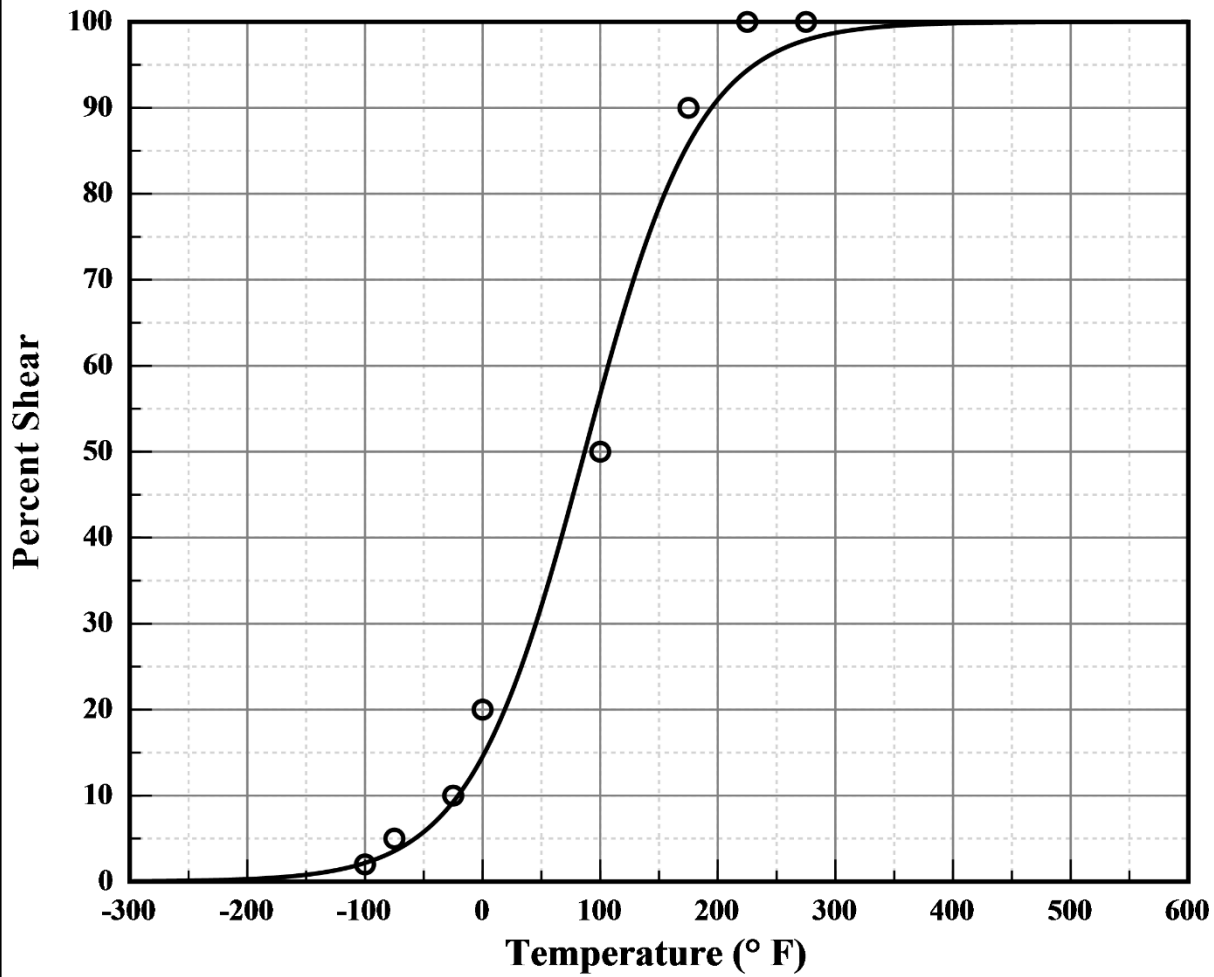
Lower Shelf %Shear = 0.00 (Fixed)

Temperature at 50% Shear = 86.90

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **P**

Heat: **2721**
Fluence: **4.27E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: P

Heat: **2721**
Fluence: **4.27E+019 n/cm²**

Capsule P Weld Metal Charpy V-Notch Data

Temperature (° F)	Input %Shear	Computed %Shear	Differential
-100	2.0	2.2	-0.17
-75	5.0	3.6	1.45
-25	10.0	9.3	0.73
0	20.0	14.5	5.46
100	50.0	56.7	-6.68
175	90.0	85.8	4.20
225	100.0	94.4	5.63
275	100.0	97.9	2.11

Capsule N Weld Metal

CVGraph 6.02: Hyperbolic Tangent Curve Printed on 7/12/2022 7:03 AM

A = 50.00 B = 50.00 C = 104.35 T0 = 137.94 D = 0.00

Correlation Coefficient = 0.978

Equation is $A + B * [\text{Tanh}((T-T_0)/(C+DT))]$

Upper Shelf %Shear = 100.00 (Fixed)

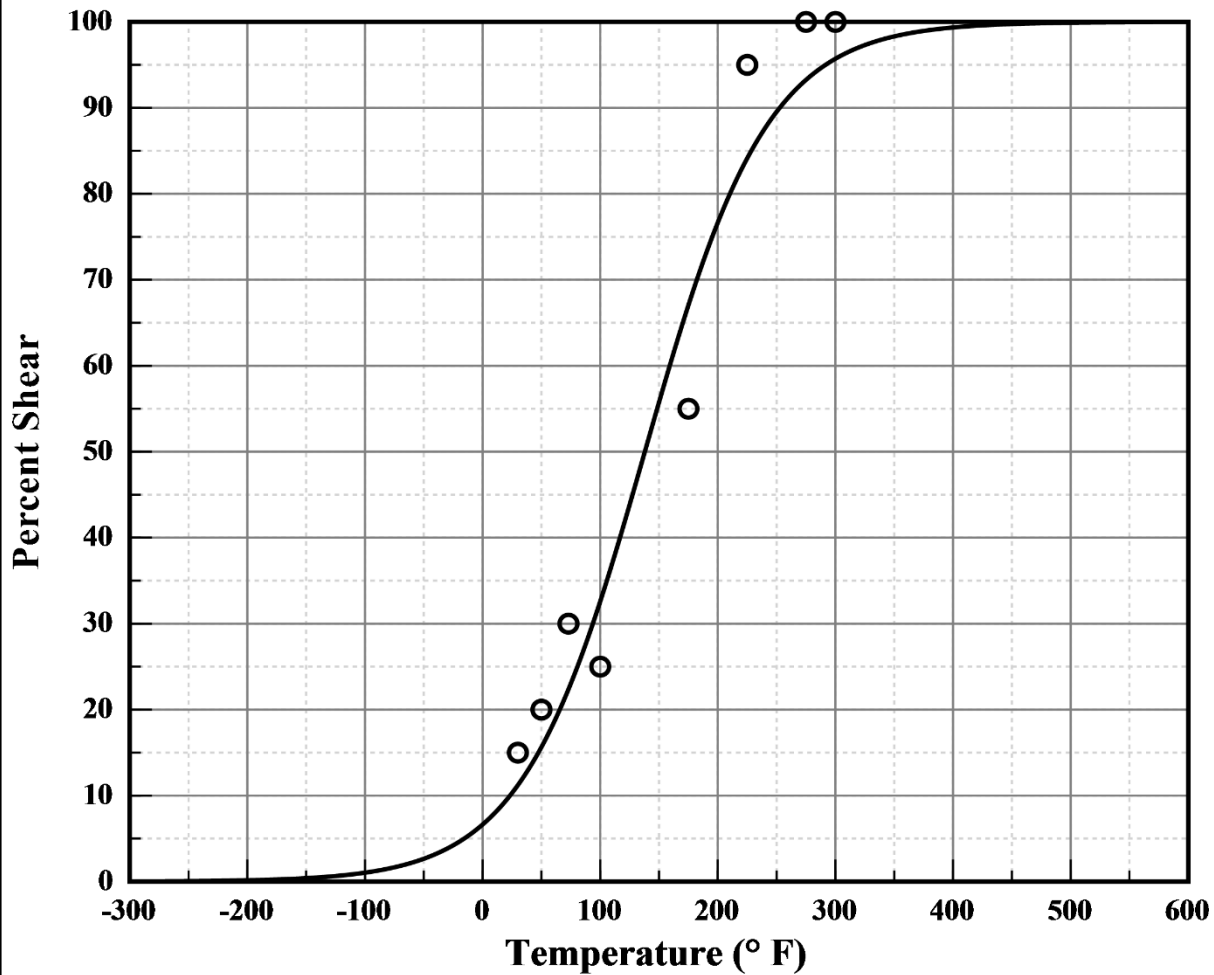
Lower Shelf %Shear = 0.00 (Fixed)

Temperature at 50% Shear = 138.00

Plant: **Prairie Island 2**
Orientation: **NA**

Material: **Weld**
Capsule: **N**

Heat: **2721**
Fluence: **8.41E+019 n/cm²**



Plant: **Prairie Island 2**
Orientation: NA

Material: **Weld**
Capsule: N

Heat: **2721**
Fluence: **8.41E+019 n/cm²**

Capsule N Weld Metal Charpy V-Notch Data

Temperature (° F)	Input %Shear	Computed %Shear	Differential
30	15.0	11.2	3.78
50	20.0	15.6	4.36
73	30.0	22.4	7.64
100	25.0	32.6	-7.58
175	55.0	67.0	-12.05
225	95.0	84.1	10.86
275	100.0	93.3	6.74
300	100.0	95.7	4.29