

BP

Pressure Test Report

COMPANY INFORMATION

Company Name	Hilcorp
Representative	Priscilla Shorty
Phone	
Fax	
Address	

E-Mail Address	
Service Company	Expert Downhole Services, Inc.

WELL INFORMATION

Well Name	Allison Unit #1 POW
Well Location	T32N, R6W, Sec. 17
Field and Pool	Basin Fruitland Coal
Status (Oil, Gas, Water, Injection)	Observation
Perforated Intervals	3064-3114
Mid-point of Perforated Intervals (MPP)	
Drilling Rig Number	
Elevations	
Kelly Bushing (KB)	
Casing Flange (CF)	
KB-CF	
Ground Level	6547
Plug Back Total Depth	8082
Total Depth	8660
Production Casing	7 to 3240
Production Tubing	2 3/8 to 2989

TEST INFORMATION

Type of Test	POOH Static Gradient
Date(s) of Test	5/15/18
Dead-weight Gauge Tubing Pressure	0
Dead-weight Gauge Casing Pressure	
Shut-in Date (Duration)	
Date / Time on Bottom	5/15/18 @1003
Date / Time off Bottom	5/15/18 @1103
Probe Serial Number	W1035
Probe Offset from End of Tool String	0-6000
Run Depth at Probe Pressure Port	3000

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure	1312.3 psig
Maximum Recorded Probe Temperature	112.7 deg F
Final Buildup Pressure	
Gradient Survey Information	
Extrapolated Pressure to MPP	
Final Gradient at Depth	
Job Number	

NMOC

MAY 29 2018

DISTRICT III

Company Name Hilcorp
Well Name Allison Unit #1 POW
Type of Test POOH Static Gradient
Date(s) of Test 5/15/18



PROBE INFORMATION

Probe Serial Number W1035

Model

Pressure

Calibrated Pressure Range

Accuracy

Resolution

Temperature

Calibrated Temperature Range

Accuracy

Resolution

Calibration File Used for Reports

PROGRAMMING DETAILS

<u>Step</u>	<u>Sample Mode</u>	<u>Period</u>	<u>Duration</u>	<u>Comment</u>
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Program Start Time
Program End Time
Total Samples Taken
Usage for this Test
Generic Data File Name

Company Name	Hilcorp
Well Name	Allison Unit #1 POW
Type of Test	POOH Static Gradient
Date(s) of Test	5/15/18



COMMENTS

Reported By

Expert Downhole Services, Inc.

RIH with 1 1/2 IB and tagged fill @ 3007 WLM. RIH with BHP gauge to 3000 for 1 hour, then POOH making 5 minute stops per request.

Company
 Well Name
 Type of Test
 Date(s) of Test

Hilcorp
 Allison Unit #1 POW
 POOH Static Gradient
 5/15/18



Pressure vs. Depth

Probe Serial Number W1035

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
1003	1103	3000.000	1293.239	-	107.677	-
1106	1111	2500.000	1096.934	0.3926	105.222	0.0049
1112	1117	2000.000	909.358	0.3752	97.286	0.0159
1119	1124	1500.000	658.382	0.5020	84.886	0.0248
1126	1131	1000.000	436.924	0.4429	75.510	0.0188
1132	1137	500.000	233.962	0.4059	66.304	0.0184
1139	1144	0.000	-3.387	0.4747	57.146	0.0183

Extrapolated to MPP:

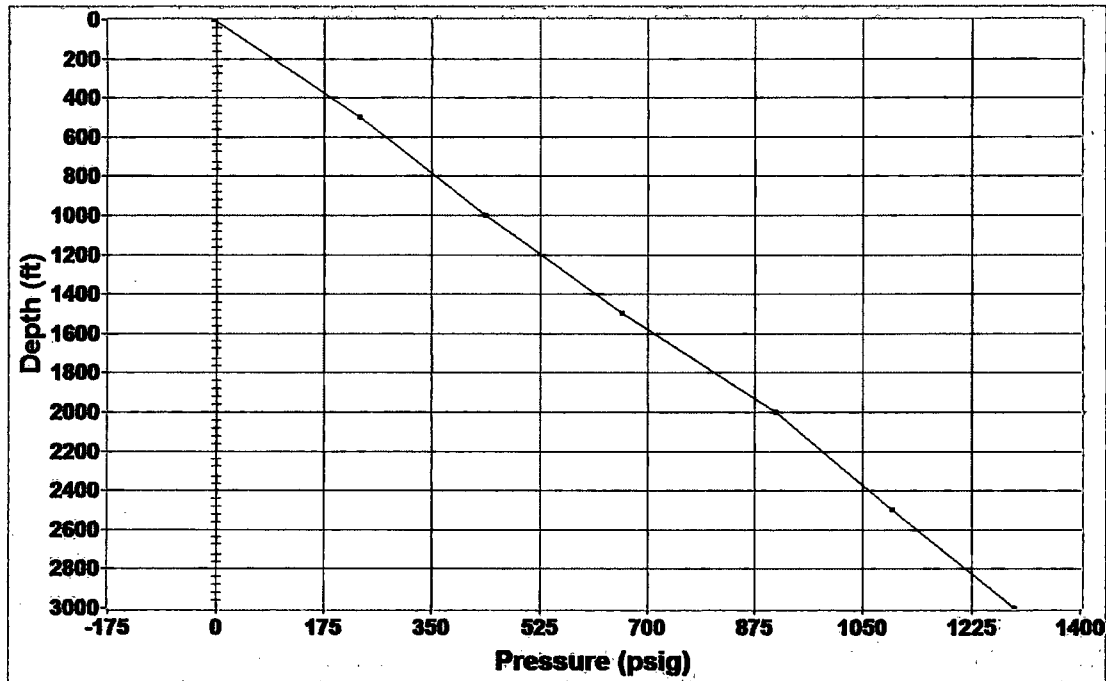
(ft)	(psig)	(deg F)
0.000		

Company Name Hilcorp
Well Name Allison Unit #1 POW
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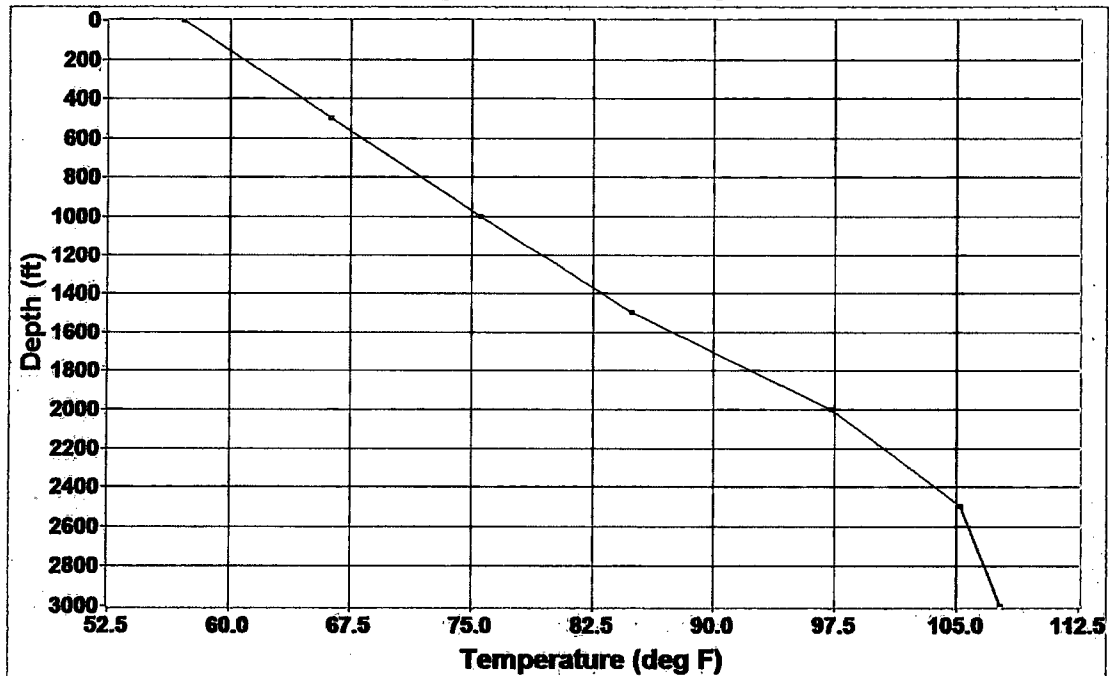


Probe Serial Number W1035

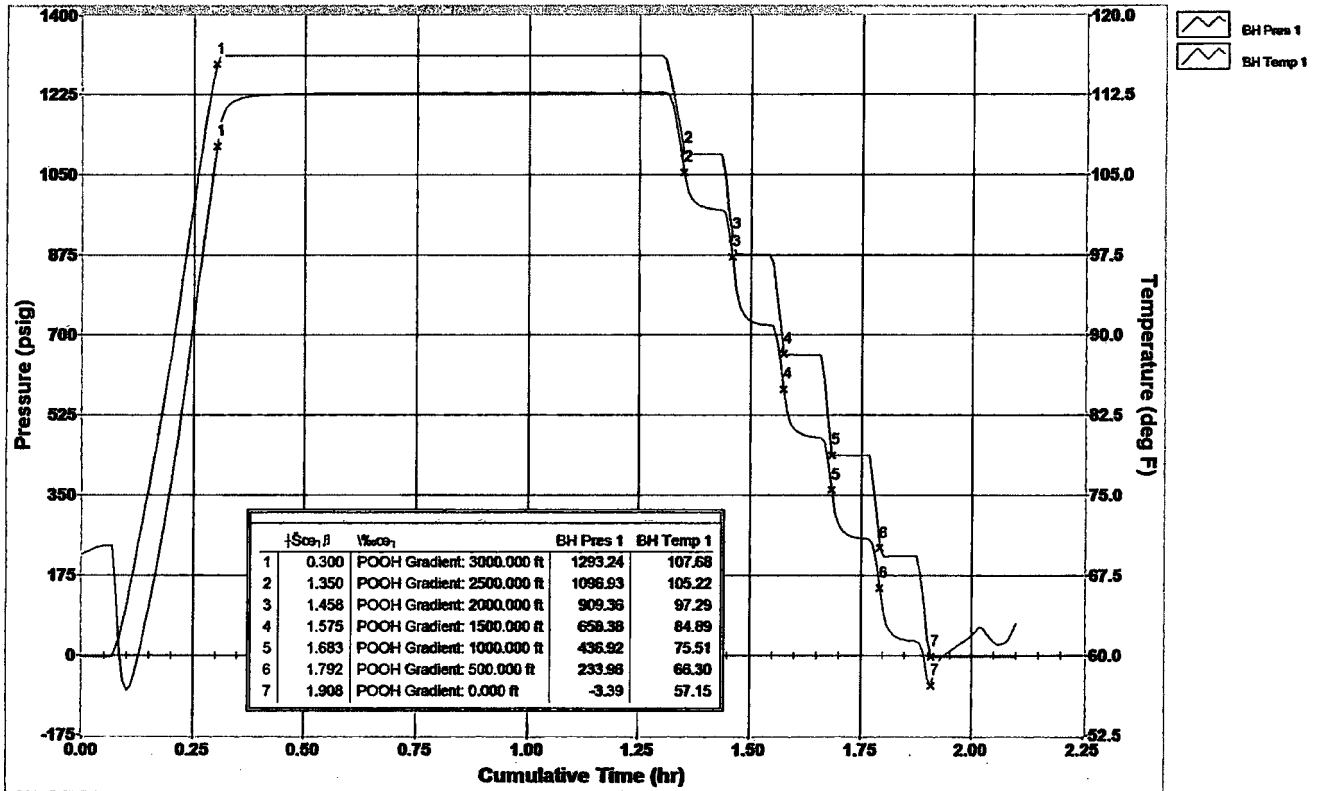
W1035 Depth vs. Pressure



W1035 Depth vs. Temperature



Allison Unit #1 POW



Company Name Hilcorp
Well Name Allison Unit #1 POW
Type of Test POOH Static Gradient
Date(s) of Test 5/15/18



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/15	09:45:11	0.0000	-3.547	69.483
2018/05/15	09:45:41	0.0083	-3.358	69.651
2018/05/15	09:46:11	0.0167	-3.239	69.775
2018/05/15	09:46:41	0.0250	-3.256	69.949
2018/05/15	09:47:11	0.0333	-3.256	70.115
2018/05/15	09:47:41	0.0417	-3.261	70.149
2018/05/15	09:48:11	0.0500	-3.281	70.241
2018/05/15	09:48:41	0.0583	-3.277	70.248
2018/05/15	09:49:11	0.0667	-3.949	70.237
2018/05/15	09:49:41	0.0750	14.306	66.139
2018/05/15	09:50:11	0.0833	38.819	60.226
2018/05/15	09:50:41	0.0917	71.567	57.587
2018/05/15	09:51:11	0.1000	109.444	56.736
2018/05/15	09:51:41	0.1083	151.757	57.123
2018/05/15	09:52:11	0.1167	195.288	58.318
2018/05/15	09:52:41	0.1250	240.546	59.556
2018/05/15	09:53:11	0.1333	284.830	61.187
2018/05/15	09:53:41	0.1417	326.766	62.850
2018/05/15	09:54:11	0.1500	367.871	64.512
2018/05/15	09:54:41	0.1583	413.638	66.227
2018/05/15	09:55:11	0.1667	458.134	68.112
2018/05/15	09:55:41	0.1750	505.579	70.043
2018/05/15	09:56:11	0.1833	554.448	71.985
2018/05/15	09:56:41	0.1917	606.043	74.046
2018/05/15	09:57:11	0.2000	657.487	76.204
2018/05/15	09:57:41	0.2083	710.673	78.402
2018/05/15	09:58:11	0.2167	766.629	80.776
2018/05/15	09:58:41	0.2250	824.170	83.268
2018/05/15	09:59:11	0.2333	882.563	85.905
2018/05/15	09:59:41	0.2417	936.235	88.642
2018/05/15	10:00:11	0.2500	990.724	91.503
2018/05/15	10:00:41	0.2583	1047.302	94.374
2018/05/15	10:01:11	0.2667	1100.580	96.994
2018/05/15	10:01:41	0.2750	1154.481	99.667
2018/05/15	10:02:11	0.2833	1204.088	102.430
2018/05/15	10:02:41	0.2917	1249.166	105.114
POOH Gradient: 3000.000 ft				
2018/05/15	10:03:11	0.3000	1293.239	107.677
2018/05/15	10:03:41	0.3083	1310.792	109.857
2018/05/15	10:04:11	0.3167	1311.217	110.919
2018/05/15	10:04:41	0.3250	1311.668	111.432
2018/05/15	10:05:11	0.3333	1311.875	111.735
2018/05/15	10:05:41	0.3417	1311.983	111.940
2018/05/15	10:06:11	0.3500	1312.044	112.077
2018/05/15	10:06:41	0.3583	1312.103	112.185
2018/05/15	10:07:11	0.3667	1312.177	112.267
2018/05/15	10:07:41	0.3750	1312.150	112.323
2018/05/15	10:08:11	0.3833	1312.178	112.372
2018/05/15	10:08:41	0.3917	1312.229	112.411
2018/05/15	10:09:11	0.4000	1312.200	112.438
2018/05/15	10:09:41	0.4083	1312.209	112.460
2018/05/15	10:10:11	0.4167	1312.212	112.482
2018/05/15	10:10:41	0.4250	1312.230	112.507
2018/05/15	10:11:11	0.4333	1312.243	112.521

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/15	10:11:41	0.4417	1312.250	112.530
2018/05/15	10:12:11	0.4500	1312.266	112.545
2018/05/15	10:12:41	0.4583	1312.271	112.550
2018/05/15	10:13:11	0.4667	1312.260	112.566
2018/05/15	10:13:41	0.4750	1312.272	112.577
2018/05/15	10:14:11	0.4833	1312.276	112.581
2018/05/15	10:14:41	0.4917	1312.277	112.584
2018/05/15	10:15:11	0.5000	1312.289	112.595
2018/05/15	10:15:41	0.5083	1312.293	112.600
2018/05/15	10:16:11	0.5167	1312.296	112.604
2018/05/15	10:16:41	0.5250	1312.271	112.615
2018/05/15	10:17:11	0.5333	1312.267	112.615
2018/05/15	10:17:41	0.5417	1312.270	112.618
2018/05/15	10:18:11	0.5500	1312.275	112.624
2018/05/15	10:18:41	0.5583	1312.269	112.622
2018/05/15	10:19:11	0.5667	1312.258	112.629
2018/05/15	10:19:41	0.5750	1312.261	112.633
2018/05/15	10:20:11	0.5833	1312.268	112.640
2018/05/15	10:20:41	0.5917	1312.267	112.642
2018/05/15	10:21:11	0.6000	1312.260	112.640
2018/05/15	10:21:41	0.6083	1312.260	112.642
2018/05/15	10:22:11	0.6167	1312.273	112.653
2018/05/15	10:22:41	0.6250	1312.267	112.651
2018/05/15	10:23:11	0.6333	1312.267	112.654
2018/05/15	10:23:41	0.6417	1312.267	112.656
2018/05/15	10:24:11	0.6500	1312.268	112.656
2018/05/15	10:24:41	0.6583	1312.257	112.651
2018/05/15	10:25:11	0.6667	1312.266	112.660
2018/05/15	10:25:41	0.6750	1312.263	112.660
2018/05/15	10:26:11	0.6833	1312.261	112.660
2018/05/15	10:26:41	0.6917	1312.259	112.662
2018/05/15	10:27:11	0.7000	1312.257	112.662
2018/05/15	10:27:41	0.7083	1312.260	112.665
2018/05/15	10:28:11	0.7167	1312.258	112.667
2018/05/15	10:28:41	0.7250	1312.254	112.665
2018/05/15	10:29:11	0.7333	1312.253	112.667
2018/05/15	10:29:41	0.7417	1312.245	112.662
2018/05/15	10:30:11	0.7500	1312.246	112.662
2018/05/15	10:30:41	0.7583	1312.244	112.663
2018/05/15	10:31:11	0.7667	1312.239	112.662
2018/05/15	10:31:41	0.7750	1312.237	112.660
2018/05/15	10:32:11	0.7833	1312.239	112.662
2018/05/15	10:32:41	0.7917	1312.240	112.665
2018/05/15	10:33:11	0.8000	1312.243	112.663
2018/05/15	10:33:41	0.8083	1312.253	112.672
2018/05/15	10:34:11	0.8167	1312.246	112.669
2018/05/15	10:34:41	0.8250	1312.238	112.665
2018/05/15	10:35:11	0.8333	1312.245	112.667
2018/05/15	10:35:41	0.8417	1312.243	112.663
2018/05/15	10:36:11	0.8500	1312.244	112.667
2018/05/15	10:36:41	0.8583	1312.251	112.672
2018/05/15	10:37:11	0.8667	1312.245	112.669
2018/05/15	10:37:41	0.8750	1312.244	112.669
2018/05/15	10:38:11	0.8833	1312.245	112.671

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Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/15	10:38:41	0.8917	1312.241	112.667
2018/05/15	10:39:11	0.9000	1312.241	112.669
2018/05/15	10:39:41	0.9083	1312.247	112.674
2018/05/15	10:40:11	0.9167	1312.239	112.671
2018/05/15	10:40:41	0.9250	1312.241	112.671
2018/05/15	10:41:11	0.9333	1312.241	112.667
2018/05/15	10:41:41	0.9417	1312.254	112.676
2018/05/15	10:42:11	0.9500	1312.253	112.678
2018/05/15	10:42:41	0.9583	1312.243	112.672
2018/05/15	10:43:11	0.9667	1312.232	112.667
2018/05/15	10:43:41	0.9750	1312.239	112.672
2018/05/15	10:44:11	0.9833	1312.238	112.674
2018/05/15	10:44:41	0.9917	1312.235	112.674
2018/05/15	10:45:11	1.0000	1312.221	112.667
2018/05/15	10:45:41	1.0083	1312.230	112.674
2018/05/15	10:46:11	1.0167	1312.218	112.669
2018/05/15	10:46:41	1.0250	1312.223	112.672
2018/05/15	10:47:11	1.0333	1312.224	112.672
2018/05/15	10:47:41	1.0417	1312.230	112.676
2018/05/15	10:48:11	1.0500	1312.223	112.672
2018/05/15	10:48:41	1.0583	1312.222	112.674
2018/05/15	10:49:11	1.0667	1312.220	112.671
2018/05/15	10:49:41	1.0750	1312.221	112.672
2018/05/15	10:50:11	1.0833	1312.212	112.669
2018/05/15	10:50:41	1.0917	1312.216	112.672
2018/05/15	10:51:11	1.1000	1312.219	112.674
2018/05/15	10:51:41	1.1083	1312.210	112.669
2018/05/15	10:52:11	1.1167	1312.213	112.674
2018/05/15	10:52:41	1.1250	1312.208	112.672
2018/05/15	10:53:11	1.1333	1312.205	112.671
2018/05/15	10:53:41	1.1417	1312.207	112.672
2018/05/15	10:54:11	1.1500	1312.200	112.671
2018/05/15	10:54:41	1.1583	1312.196	112.671
2018/05/15	10:55:11	1.1667	1312.189	112.667
2018/05/15	10:55:41	1.1750	1312.182	112.660
2018/05/15	10:56:11	1.1833	1312.177	112.656
2018/05/15	10:56:41	1.1917	1312.189	112.667
2018/05/15	10:57:11	1.2000	1312.193	112.667
2018/05/15	10:57:41	1.2083	1312.189	112.665
2018/05/15	10:58:11	1.2167	1312.195	112.669
2018/05/15	10:58:41	1.2250	1312.192	112.667
2018/05/15	10:59:11	1.2333	1312.191	112.667
2018/05/15	10:59:41	1.2417	1312.198	112.669
2018/05/15	11:00:11	1.2500	1312.207	112.674
2018/05/15	11:00:41	1.2583	1312.205	112.672
2018/05/15	11:01:11	1.2667	1312.210	112.678
2018/05/15	11:01:41	1.2750	1312.203	112.671
2018/05/15	11:02:11	1.2833	1312.203	112.671
2018/05/15	11:02:41	1.2917	1312.207	112.674
2018/05/15	11:03:11	1.3000	1312.205	112.674
2018/05/15	11:03:41	1.3083	1303.363	112.669
2018/05/15	11:04:11	1.3167	1270.384	112.341
2018/05/15	11:04:41	1.3250	1229.665	111.247
2018/05/15	11:05:11	1.3333	1186.278	109.517

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/15	11:05:41	1.3417	1141.506	107.427
POOH Gradient: 2500.000 ft				
2018/05/15	11:06:11	1.3500	1096.934	105.222
2018/05/15	11:06:41	1.3583	1094.916	103.462
2018/05/15	11:07:11	1.3667	1094.957	102.736
2018/05/15	11:07:41	1.3750	1094.610	102.355
2018/05/15	11:08:11	1.3833	1094.358	102.132
2018/05/15	11:08:41	1.3917	1094.198	101.986
2018/05/15	11:09:11	1.4000	1094.167	101.890
2018/05/15	11:09:41	1.4083	1094.227	101.820
2018/05/15	11:10:11	1.4167	1094.173	101.768
2018/05/15	11:10:41	1.4250	1094.183	101.725
2018/05/15	11:11:11	1.4333	1094.183	101.698
2018/05/15	11:11:41	1.4417	1049.580	101.413
2018/05/15	11:12:11	1.4500	977.846	99.829
POOH Gradient: 2000.000 ft				
2018/05/15	11:12:41	1.4583	909.358	97.286
2018/05/15	11:13:11	1.4667	877.419	94.269
2018/05/15	11:13:41	1.4750	875.990	92.647
2018/05/15	11:14:11	1.4833	875.690	91.920
2018/05/15	11:14:41	1.4917	875.867	91.512
2018/05/15	11:15:11	1.5000	875.885	91.281
2018/05/15	11:15:41	1.5083	875.755	91.130
2018/05/15	11:16:11	1.5167	875.682	91.024
2018/05/15	11:16:41	1.5250	875.625	90.955
2018/05/15	11:17:11	1.5333	875.589	90.910
2018/05/15	11:17:41	1.5417	875.557	90.871
2018/05/15	11:18:11	1.5500	857.419	90.819
2018/05/15	11:18:41	1.5583	793.815	89.740
2018/05/15	11:19:11	1.5667	725.803	87.559
POOH Gradient: 1500.000 ft				
2018/05/15	11:19:41	1.5750	658.382	84.886
2018/05/15	11:20:11	1.5833	656.383	82.602
2018/05/15	11:20:41	1.5917	656.546	81.640
2018/05/15	11:21:11	1.6000	656.297	81.131
2018/05/15	11:21:41	1.6083	656.199	80.848
2018/05/15	11:22:11	1.6167	656.122	80.665
2018/05/15	11:22:41	1.6250	656.135	80.546
2018/05/15	11:23:11	1.6333	656.147	80.470
2018/05/15	11:23:41	1.6417	656.170	80.416
2018/05/15	11:24:11	1.6500	656.149	80.377
2018/05/15	11:24:41	1.6583	656.165	80.343
2018/05/15	11:25:11	1.6667	599.669	80.001
2018/05/15	11:25:41	1.6750	517.369	78.238
POOH Gradient: 1000.000 ft				
2018/05/15	11:26:11	1.6833	436.924	75.510
2018/05/15	11:26:41	1.6917	436.408	73.188
2018/05/15	11:27:11	1.7000	436.486	72.181
2018/05/15	11:27:41	1.7083	436.558	71.659
2018/05/15	11:28:11	1.7167	436.504	71.370
2018/05/15	11:28:41	1.7250	436.472	71.193
2018/05/15	11:29:11	1.7333	436.437	71.078
2018/05/15	11:29:41	1.7417	436.416	71.004
2018/05/15	11:30:11	1.7500	436.440	70.954

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Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/15	11:30:41	1.7583	436.431	70.916
2018/05/15	11:31:11	1.7667	436.444	70.885
2018/05/15	11:31:41	1.7750	377.244	70.410
2018/05/15	11:32:11	1.7833	308.071	68.648
POOH Gradient: 500.000 ft				
2018/05/15	11:32:41	1.7917	233.962	66.304
2018/05/15	11:33:11	1.8000	215.985	63.921
2018/05/15	11:33:41	1.8083	216.173	62.755
2018/05/15	11:34:11	1.8167	216.583	62.166
2018/05/15	11:34:41	1.8250	216.692	61.839
2018/05/15	11:35:11	1.8333	216.688	61.648
2018/05/15	11:35:41	1.8417	216.680	61.518
2018/05/15	11:36:11	1.8500	216.680	61.443
2018/05/15	11:36:41	1.8583	216.678	61.385
2018/05/15	11:37:11	1.8667	216.679	61.345
2018/05/15	11:37:41	1.8750	216.681	61.315
2018/05/15	11:38:11	1.8833	178.829	61.124
2018/05/15	11:38:41	1.8917	113.222	60.033
2018/05/15	11:39:11	1.9000	35.854	57.895
POOH Gradient: 0.000 ft				
2018/05/15	11:39:41	1.9083	-3.387	57.146
2018/05/15	11:40:11	1.9167	-3.159	58.831
2018/05/15	11:40:41	1.9250	-3.142	59.410
2018/05/15	11:41:11	1.9333	-3.046	59.778
2018/05/15	11:41:41	1.9417	-3.123	60.082
2018/05/15	11:42:11	1.9500	-3.137	60.355
2018/05/15	11:42:41	1.9583	-2.916	60.609
2018/05/15	11:43:11	1.9667	-3.145	60.858
2018/05/15	11:43:41	1.9750	-3.203	61.093
2018/05/15	11:44:11	1.9833	-3.213	61.327
2018/05/15	11:44:41	1.9917	-3.267	61.560
2018/05/15	11:45:11	2.0000	-3.202	61.858
2018/05/15	11:45:41	2.0083	-2.863	62.236
2018/05/15	11:46:11	2.0167	-2.866	62.629
2018/05/15	11:46:41	2.0250	-2.831	62.497
2018/05/15	11:47:11	2.0333	-2.504	62.011
2018/05/15	11:47:41	2.0417	-2.755	61.578
2018/05/15	11:48:11	2.0500	-2.809	61.234
2018/05/15	11:48:41	2.0583	-2.748	60.975
2018/05/15	11:49:11	2.0667	-2.768	61.043
2018/05/15	11:49:41	2.0750	-2.801	61.167
2018/05/15	11:50:11	2.0833	-2.857	61.498
2018/05/15	11:50:41	2.0917	-2.840	62.249