

SAN JUAN 31-6 UNIT 229
30-045-24944

039
MK

Pressure Test Report

COMPANY INFORMATION

Company Name	Hilcorp
Representative	Priscilla Shorty
Phone	
Fax	
Address	

NMOCB
JUN 04 2018
DISTRICT III

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

WELL INFORMATION

Well Name	San Juan 31-6 Unit #229
Well Location	T31N, R6W, Sec 28
Field and Pool	Fruitland Coal
Status (Oil, Gas, Water, Injection)	Observation
Perforated Intervals	3218-3360
Mid-point of Perforated Intervals (MPP)	
Drilling Rig Number	
Elevations	
Kelly Bushing (KB)	13
Casing Flange (CF)	
KB-CF	
Ground Level	6501
Plug Back Total Depth	3365
Total Depth	3365
Production Casing	5 1/2 to 4670
Production Tubing	2 3/8 to 3315

TEST INFORMATION

Type of Test	POOH Static Gradient
Date(s) of Test	5/31/18
Dead-weight Gauge Tubing Pressure	160
Dead-weight Gauge Casing Pressure	
Shut-in Date (Duration)	
Date / Time on Bottom	5/31/18 @1259
Date / Time off Bottom	5/31/18 @1359
Probe Serial Number	W1031
Probe Offset from End of Tool String	0-6000
Run Depth at Probe Pressure Port	3312

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure	171.9 psig
Maximum Recorded Probe Temperature	113.9 deg F
Final Buildup Pressure	
Gradient Survey Information	
Extrapolated Pressure to MPP	
Final Gradient at Depth	
Job Number	

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Company Name Hilcorp
Well Name San Juan 31-6 Unit #229
Type of Test POOH Static Gradient
Date(s) of Test 5/31/18



PROBE INFORMATION

Probe Serial Number W1031

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	Hilcorp
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COMMENTS

Reported By

Expert Downhole Services, Inc.

RIH with 1.50 IB and tagged fill @3315 WLM. RIH with BHP gauge to 3312 for 1 hour, then POOH making 5 minute stops per request.

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Pressure vs. Depth

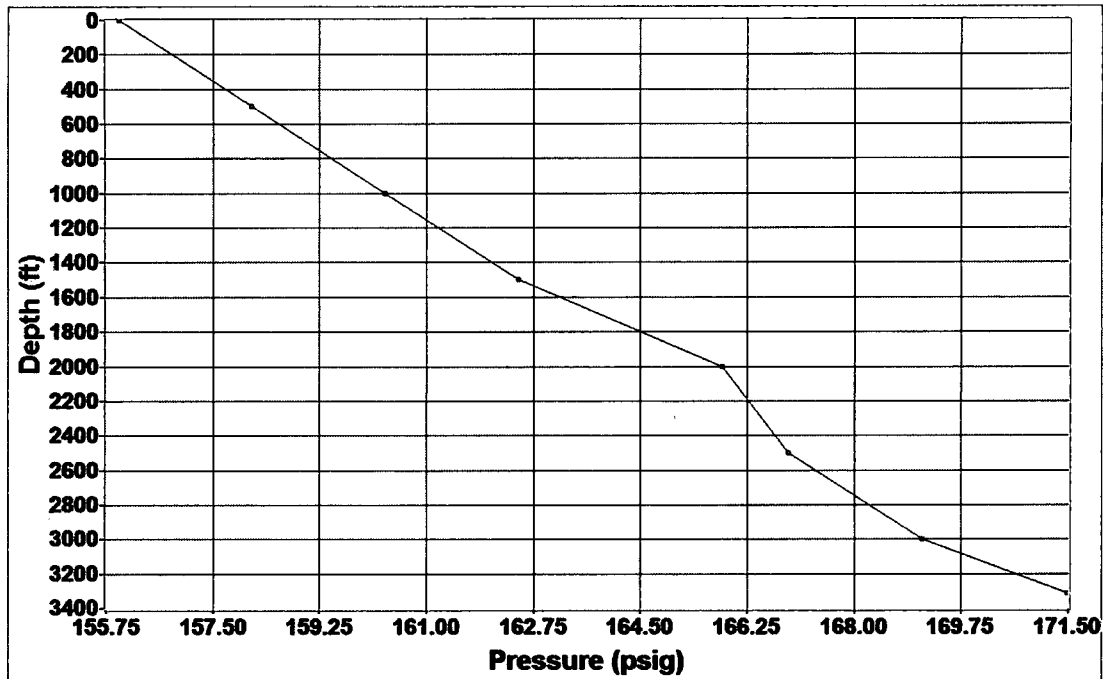
Probe Serial Number W1031

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
1259	1359	3312.000	171.493	-	93.092	-
1400	1405	3000.000	169.114	0.0076	112.730	-0.0629
1406	1411	2500.000	166.927	0.0044	106.790	0.0119
1412	1417	2000.000	165.846	0.0022	102.020	0.0095
1419	1424	1500.000	162.506	0.0067	90.842	0.0224
1425	1430	1000.000	160.328	0.0044	81.626	0.0184
1431	1436	500.000	158.136	0.0044	73.958	0.0153
1437	1442	0.000	155.968	0.0043	66.992	0.0139

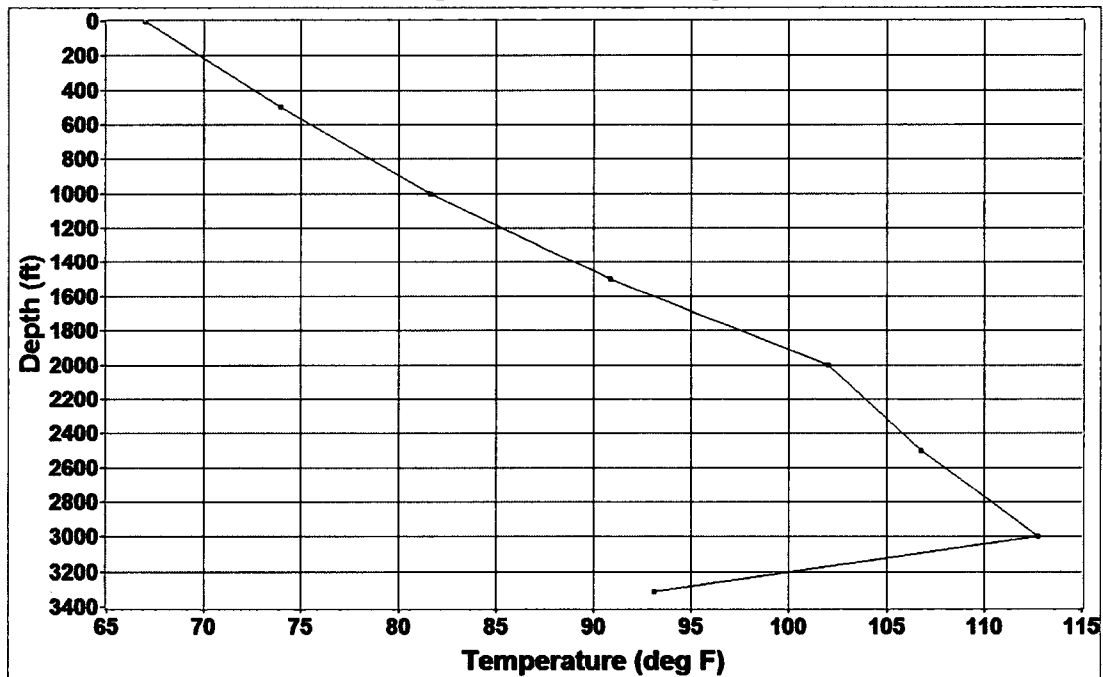
Extrapolated to MPP:

(ft)	(psig)	(deg F)
0.000		

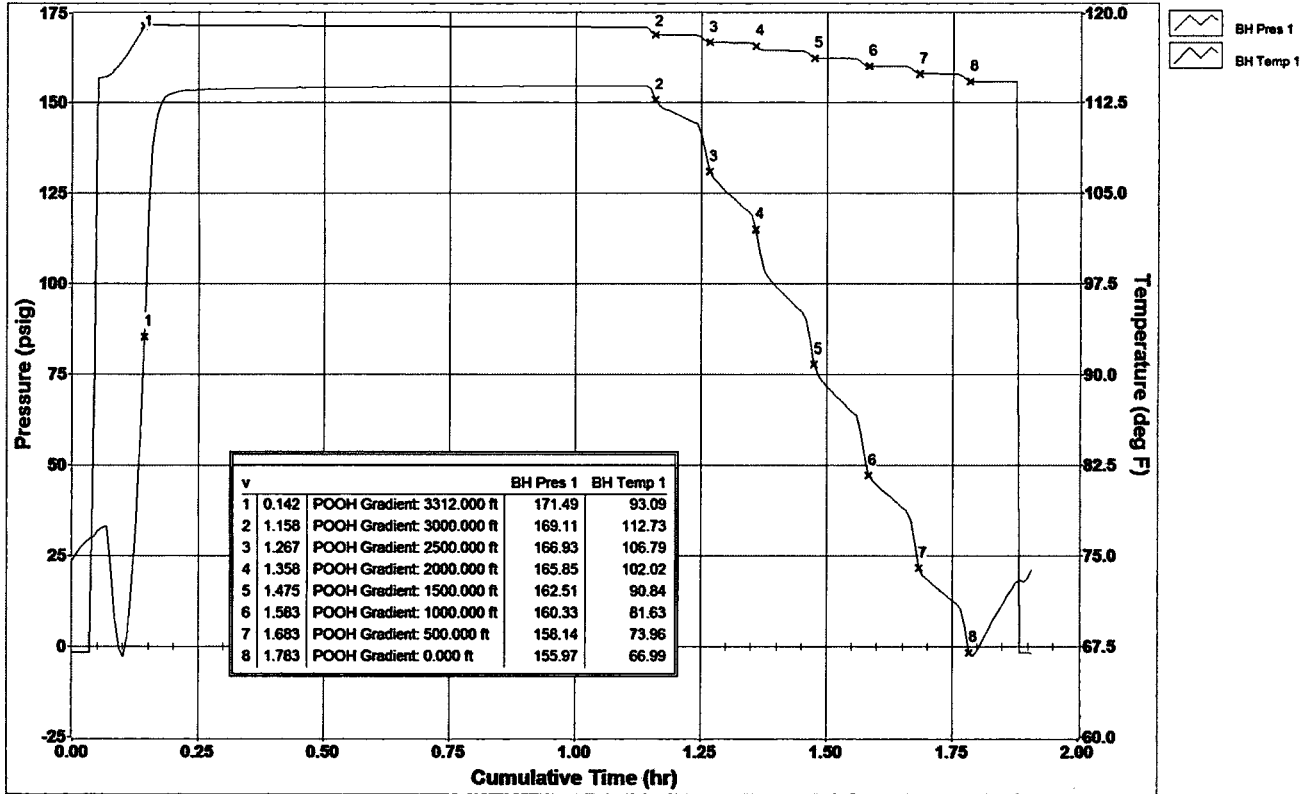
W1031 Depth vs. Pressure



W1031 Depth vs. Temperature



San Juan 31-6 Unit #229



Company Name Hilcorp
Well Name San Juan 31-6 Unit #229
Type of Test POOH Static Gradient
Date(s) of Test 5/31/18



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/31	12:50:36	0.0000	-1.784	74.678
2018/05/31	12:51:06	0.0083	-1.755	75.182
2018/05/31	12:51:36	0.0167	-1.727	75.704
2018/05/31	12:52:06	0.0250	-1.717	76.082
2018/05/31	12:52:36	0.0333	-1.701	76.388
2018/05/31	12:53:06	0.0417	65.744	76.550
2018/05/31	12:53:36	0.0500	156.977	77.054
2018/05/31	12:54:06	0.0583	157.064	77.342
2018/05/31	12:54:36	0.0667	157.302	77.396
2018/05/31	12:55:06	0.0750	158.122	74.066
2018/05/31	12:55:36	0.0833	159.262	69.962
2018/05/31	12:56:06	0.0917	160.629	67.298
2018/05/31	12:56:36	0.1000	162.151	66.650
2018/05/31	12:57:06	0.1083	163.849	68.342
2018/05/31	12:57:36	0.1167	165.680	72.266
2018/05/31	12:58:06	0.1250	167.678	77.990
2018/05/31	12:58:36	0.1333	169.611	85.028
POOH Gradient: 3312.000 ft				
2018/05/31	12:59:06	0.1417	171.493	93.092
2018/05/31	12:59:36	0.1500	171.755	103.082
2018/05/31	13:00:06	0.1583	171.852	108.734
2018/05/31	13:00:36	0.1667	171.839	111.272
2018/05/31	13:01:06	0.1750	171.883	112.406
2018/05/31	13:01:36	0.1833	171.741	112.928
2018/05/31	13:02:06	0.1917	171.738	113.162
2018/05/31	13:02:36	0.2000	171.722	113.306
2018/05/31	13:03:06	0.2083	171.730	113.396
2018/05/31	13:03:36	0.2167	171.739	113.450
2018/05/31	13:04:06	0.2250	171.712	113.504
2018/05/31	13:04:36	0.2333	171.703	113.522
2018/05/31	13:05:06	0.2417	171.703	113.540
2018/05/31	13:05:36	0.2500	171.703	113.576
2018/05/31	13:06:06	0.2583	171.694	113.594
2018/05/31	13:06:36	0.2667	171.699	113.612
2018/05/31	13:07:06	0.2750	171.686	113.630
2018/05/31	13:07:36	0.2833	171.643	113.630
2018/05/31	13:08:06	0.2917	171.645	113.630
2018/05/31	13:08:36	0.3000	171.672	113.648
2018/05/31	13:09:06	0.3083	171.648	113.666
2018/05/31	13:09:36	0.3167	171.677	113.684
2018/05/31	13:10:06	0.3250	171.652	113.684
2018/05/31	13:10:36	0.3333	171.645	113.684
2018/05/31	13:11:06	0.3417	171.633	113.702
2018/05/31	13:11:36	0.3500	171.635	113.702
2018/05/31	13:12:06	0.3583	171.609	113.702
2018/05/31	13:12:36	0.3667	171.630	113.720
2018/05/31	13:13:06	0.3750	171.620	113.720
2018/05/31	13:13:36	0.3833	171.617	113.738
2018/05/31	13:14:06	0.3917	171.593	113.738
2018/05/31	13:14:36	0.4000	171.585	113.738
2018/05/31	13:15:06	0.4083	171.596	113.756
2018/05/31	13:15:36	0.4167	171.568	113.756
2018/05/31	13:16:06	0.4250	171.585	113.756
2018/05/31	13:16:36	0.4333	171.545	113.756

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/31	13:17:06	0.4417	171.535	113.756
2018/05/31	13:17:36	0.4500	171.558	113.774
2018/05/31	13:18:06	0.4583	171.533	113.756
2018/05/31	13:18:36	0.4667	171.530	113.774
2018/05/31	13:19:06	0.4750	171.546	113.774
2018/05/31	13:19:36	0.4833	171.540	113.774
2018/05/31	13:20:06	0.4917	171.542	113.774
2018/05/31	13:20:36	0.5000	171.513	113.792
2018/05/31	13:21:06	0.5083	171.490	113.792
2018/05/31	13:21:36	0.5167	171.509	113.792
2018/05/31	13:22:06	0.5250	171.487	113.792
2018/05/31	13:22:36	0.5333	171.500	113.792
2018/05/31	13:23:06	0.5417	171.491	113.792
2018/05/31	13:23:36	0.5500	171.478	113.792
2018/05/31	13:24:06	0.5583	171.482	113.810
2018/05/31	13:24:36	0.5667	171.474	113.810
2018/05/31	13:25:06	0.5750	171.453	113.810
2018/05/31	13:25:36	0.5833	171.445	113.810
2018/05/31	13:26:06	0.5917	171.430	113.810
2018/05/31	13:26:36	0.6000	171.468	113.828
2018/05/31	13:27:06	0.6083	171.456	113.810
2018/05/31	13:27:36	0.6167	171.436	113.810
2018/05/31	13:28:06	0.6250	171.419	113.828
2018/05/31	13:28:36	0.6333	171.400	113.828
2018/05/31	13:29:06	0.6417	171.407	113.828
2018/05/31	13:29:36	0.6500	171.393	113.828
2018/05/31	13:30:06	0.6583	171.410	113.846
2018/05/31	13:30:36	0.6667	171.408	113.846
2018/05/31	13:31:06	0.6750	171.395	113.846
2018/05/31	13:31:36	0.6833	171.400	113.846
2018/05/31	13:32:06	0.6917	171.394	113.846
2018/05/31	13:32:36	0.7000	171.410	113.846
2018/05/31	13:33:06	0.7083	171.374	113.846
2018/05/31	13:33:36	0.7167	171.381	113.846
2018/05/31	13:34:06	0.7250	171.377	113.846
2018/05/31	13:34:36	0.7333	171.349	113.846
2018/05/31	13:35:06	0.7417	171.349	113.846
2018/05/31	13:35:36	0.7500	171.321	113.846
2018/05/31	13:36:06	0.7583	171.336	113.864
2018/05/31	13:36:36	0.7667	171.337	113.864
2018/05/31	13:37:06	0.7750	171.330	113.864
2018/05/31	13:37:36	0.7833	171.330	113.864
2018/05/31	13:38:06	0.7917	171.303	113.864
2018/05/31	13:38:36	0.8000	171.290	113.864
2018/05/31	13:39:06	0.8083	171.291	113.864
2018/05/31	13:39:36	0.8167	171.282	113.864
2018/05/31	13:40:06	0.8250	171.306	113.864
2018/05/31	13:40:36	0.8333	171.290	113.864
2018/05/31	13:41:06	0.8417	171.307	113.864
2018/05/31	13:41:36	0.8500	171.287	113.864
2018/05/31	13:42:06	0.8583	171.272	113.882
2018/05/31	13:42:36	0.8667	171.287	113.882
2018/05/31	13:43:06	0.8750	171.274	113.882
2018/05/31	13:43:36	0.8833	171.256	113.882

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Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/31	13:44:06	0.8917	171.266	113.864
2018/05/31	13:44:36	0.9000	171.268	113.882
2018/05/31	13:45:06	0.9083	171.253	113.882
2018/05/31	13:45:36	0.9167	171.239	113.882
2018/05/31	13:46:06	0.9250	171.253	113.882
2018/05/31	13:46:36	0.9333	171.247	113.882
2018/05/31	13:47:06	0.9417	171.237	113.882
2018/05/31	13:47:36	0.9500	171.223	113.882
2018/05/31	13:48:06	0.9583	171.216	113.882
2018/05/31	13:48:36	0.9667	171.211	113.882
2018/05/31	13:49:06	0.9750	171.230	113.882
2018/05/31	13:49:36	0.9833	171.217	113.882
2018/05/31	13:50:06	0.9917	171.227	113.900
2018/05/31	13:50:36	1.0000	171.189	113.900
2018/05/31	13:51:06	1.0083	171.211	113.882
2018/05/31	13:51:36	1.0167	171.197	113.900
2018/05/31	13:52:06	1.0250	171.191	113.900
2018/05/31	13:52:36	1.0333	171.175	113.900
2018/05/31	13:53:06	1.0417	171.168	113.900
2018/05/31	13:53:36	1.0500	171.169	113.882
2018/05/31	13:54:06	1.0583	171.163	113.900
2018/05/31	13:54:36	1.0667	171.153	113.900
2018/05/31	13:55:06	1.0750	171.131	113.900
2018/05/31	13:55:36	1.0833	171.158	113.882
2018/05/31	13:56:06	1.0917	171.118	113.900
2018/05/31	13:56:36	1.1000	171.160	113.900
2018/05/31	13:57:06	1.1083	171.143	113.900
2018/05/31	13:57:36	1.1167	171.140	113.900
2018/05/31	13:58:06	1.1250	171.127	113.900
2018/05/31	13:58:36	1.1333	171.116	113.900
2018/05/31	13:59:06	1.1417	171.134	113.918
2018/05/31	13:59:36	1.1500	169.807	113.630
POOH Gradient: 3000.000 ft				
2018/05/31	14:00:06	1.1583	169.114	112.730
2018/05/31	14:00:36	1.1667	169.082	112.226
2018/05/31	14:01:06	1.1750	169.085	112.028
2018/05/31	14:01:36	1.1833	169.069	111.866
2018/05/31	14:02:06	1.1917	169.066	111.704
2018/05/31	14:02:36	1.2000	169.047	111.542
2018/05/31	14:03:06	1.2083	169.044	111.380
2018/05/31	14:03:36	1.2167	169.017	111.218
2018/05/31	14:04:06	1.2250	169.002	111.074
2018/05/31	14:04:36	1.2333	169.010	110.912
2018/05/31	14:05:06	1.2417	168.937	110.786
2018/05/31	14:05:36	1.2500	168.239	109.904
2018/05/31	14:06:06	1.2583	167.366	108.410
POOH Gradient: 2500.000 ft				
2018/05/31	14:06:36	1.2667	166.927	106.790
2018/05/31	14:07:06	1.2750	166.934	106.196
2018/05/31	14:07:36	1.2833	166.909	105.836
2018/05/31	14:08:06	1.2917	166.902	105.476
2018/05/31	14:08:36	1.3000	166.892	105.152
2018/05/31	14:09:06	1.3083	166.880	104.810
2018/05/31	14:09:36	1.3167	166.834	104.486

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/31	14:10:06	1.3250	166.843	104.162
2018/05/31	14:10:36	1.3333	166.820	103.856
2018/05/31	14:11:06	1.3417	166.809	103.550
2018/05/31	14:11:36	1.3500	166.659	103.244
POOH Gradient: 2000.000 ft				
2018/05/31	14:12:06	1.3583	165.846	102.020
2018/05/31	14:12:36	1.3667	164.972	100.184
2018/05/31	14:13:06	1.3750	164.724	98.564
2018/05/31	14:13:36	1.3833	164.709	98.024
2018/05/31	14:14:06	1.3917	164.676	97.628
2018/05/31	14:14:36	1.4000	164.683	97.250
2018/05/31	14:15:06	1.4083	164.703	96.908
2018/05/31	14:15:36	1.4167	164.671	96.530
2018/05/31	14:16:06	1.4250	164.643	96.188
2018/05/31	14:16:36	1.4333	164.625	95.846
2018/05/31	14:17:06	1.4417	164.634	95.522
2018/05/31	14:17:36	1.4500	164.616	95.180
2018/05/31	14:18:06	1.4583	164.135	94.568
2018/05/31	14:18:36	1.4667	163.228	92.894
POOH Gradient: 1500.000 ft				
2018/05/31	14:19:06	1.4750	162.506	90.842
2018/05/31	14:19:36	1.4833	162.508	89.870
2018/05/31	14:20:06	1.4917	162.523	89.420
2018/05/31	14:20:36	1.5000	162.489	89.042
2018/05/31	14:21:06	1.5083	162.490	88.682
2018/05/31	14:21:36	1.5167	162.460	88.304
2018/05/31	14:22:06	1.5250	162.439	87.944
2018/05/31	14:22:36	1.5333	162.464	87.602
2018/05/31	14:23:06	1.5417	162.464	87.260
2018/05/31	14:23:36	1.5500	162.416	86.918
2018/05/31	14:24:06	1.5583	162.325	86.594
2018/05/31	14:24:36	1.5667	161.431	85.262
2018/05/31	14:25:06	1.5750	160.496	83.264
POOH Gradient: 1000.000 ft				
2018/05/31	14:25:36	1.5833	160.328	81.626
2018/05/31	14:26:06	1.5917	160.319	81.140
2018/05/31	14:26:36	1.6000	160.306	80.816
2018/05/31	14:27:06	1.6083	160.290	80.492
2018/05/31	14:27:36	1.6167	160.290	80.186
2018/05/31	14:28:06	1.6250	160.286	79.880
2018/05/31	14:28:36	1.6333	160.275	79.574
2018/05/31	14:29:06	1.6417	160.280	79.268
2018/05/31	14:29:36	1.6500	160.261	78.980
2018/05/31	14:30:06	1.6583	160.259	78.710
2018/05/31	14:30:36	1.6667	159.572	77.900
2018/05/31	14:31:06	1.6750	158.622	75.938
POOH Gradient: 500.000 ft				
2018/05/31	14:31:36	1.6833	158.136	73.958
2018/05/31	14:32:06	1.6917	158.162	73.310
2018/05/31	14:32:36	1.7000	158.155	73.004
2018/05/31	14:33:06	1.7083	158.135	72.698
2018/05/31	14:33:36	1.7167	158.138	72.410
2018/05/31	14:34:06	1.7250	158.129	72.122
2018/05/31	14:34:36	1.7333	158.126	71.834

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Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/31	14:35:06	1.7417	158.100	71.546
2018/05/31	14:35:36	1.7500	158.109	71.276
2018/05/31	14:36:06	1.7583	158.077	71.024
2018/05/31	14:36:36	1.7667	157.747	70.646
2018/05/31	14:37:06	1.7750	156.765	68.990
POOH Gradient: 0.000 ft				
2018/05/31	14:37:36	1.7833	155.968	66.992
2018/05/31	14:38:06	1.7917	155.988	66.686
2018/05/31	14:38:36	1.8000	155.991	67.226
2018/05/31	14:39:06	1.8083	155.992	67.892
2018/05/31	14:39:36	1.8167	155.994	68.540
2018/05/31	14:40:06	1.8250	156.021	69.170
2018/05/31	14:40:36	1.8333	156.023	69.818
2018/05/31	14:41:06	1.8417	156.016	70.430
2018/05/31	14:41:36	1.8500	156.081	71.024
2018/05/31	14:42:06	1.8583	156.019	71.618
2018/05/31	14:42:36	1.8667	156.065	72.158
2018/05/31	14:43:06	1.8750	155.994	72.734
2018/05/31	14:43:36	1.8833	-1.790	72.950
2018/05/31	14:44:06	1.8917	-1.648	72.824
2018/05/31	14:44:36	1.9000	-1.783	73.148