

Pressure Test Report

COMPANY INFORMATION

Company Name HILCORP
 Representative PRISCILLA SHORTY
 Phone
 Fax
 Address

NMOC

MAY 31 2013

DISTRICT III

E-Mail Address
 Service Company EXPERT DOWNHOLE SERVICES, INC.

WELL INFORMATION

Well Name SAN JUAN 27-5 UNIT POW 916
 Well Location T27N, R5W, SEC 8
 Field and Pool MV/DK
 Status (Oil, Gas, Water, Injection) OBSERVATION
 Perforated Intervals 4564-7876
 Mid-point of Perforated Intervals (MPP)
 Drilling Rig Number
 Elevations
 Kelly Bushing (KB) 15
 Casing Flange (CF)
 KB-CF
 Ground Level 6599
 Plug Back Total Depth 7968
 Total Depth 8040
 Production Casing
 Production Tubing 2 3/8

TEST INFORMATION

Type of Test POOH STATIC GRADIENT
 Date(s) of Test 5/24/19
 Dead-weight Gauge Tubing Pressure 125
 Dead-weight Gauge Casing Pressure
 Shut-in Date (Duration)
 Date / Time on Bottom 5/24/19 @0939
 Date / Time off Bottom 5/24/19 @1039
 Probe Serial Number W1162
 Probe Offset from End of Tool String 0-6000
 Run Depth at Probe Pressure Port 7500

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure 268.5 psig
 Maximum Recorded Probe Temperature 198.0 deg F
 Final Buildup Pressure
 Gradient Survey Information
 Extrapolated Pressure to MPP
 Final Gradient at Depth
 Job Number

Company Name HILCORP
Well Name SAN JUAN 27-5 UNIT POW 916
Type of Test POOH STATIC GRADIENT
Date(s) of Test 5/24/19



PROBE INFORMATION

Probe Serial Number W1162
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	SAN JUAN 27-5 UNIT POW 916
Type of Test	POOH STATIC GRADIENT
Date(s) of Test	5/24/19



COMMENTS

Reported By

EXPERT DOWNHOLE SERVICES, INC.

RIH WITH 1.50 IMPRESSION BLOCK AND TAGGED FILL @7599 WLM. RIH WITH BHP GAUGE TO 7500 FOR 1 HOUR, THEN POOH MAKING 5 MINUTE STOPS PER REQUEST.

Company Name HILCORP
 Well Name SAN JUAN 27-5 UNIT POW 916
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Pressure vs. Depth

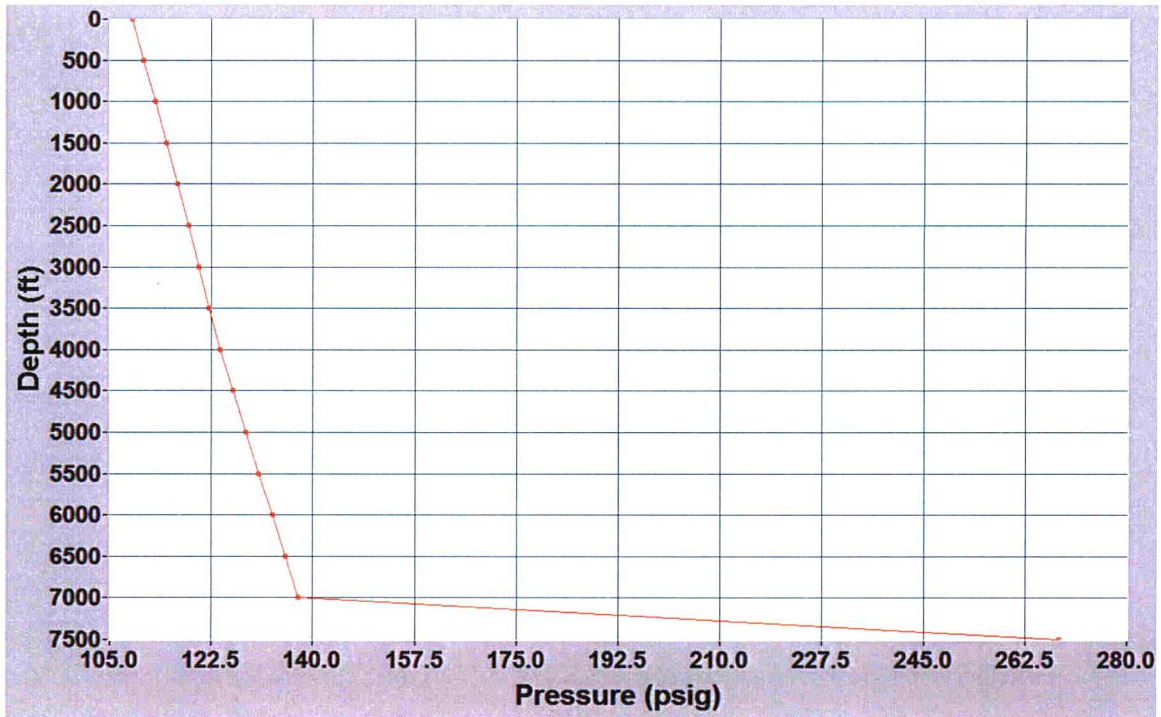
Probe Serial Number W1162

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
0939	1039	7500.000	268.458	-	193.352	-
1041	1046	7000.000	137.487	0.2619	190.364	0.0060
1048	1053	6500.000	135.394	0.0042	185.522	0.0097
1054	1059	6000.000	133.116	0.0046	178.664	0.0137
1100	1105	5500.000	130.796	0.0046	169.250	0.0188
1106	1111	5000.000	128.444	0.0047	160.286	0.0179
1112	1117	4500.000	126.235	0.0044	151.592	0.0174
1118	1123	4000.000	124.106	0.0043	143.564	0.0161
1124	1129	3500.000	122.120	0.0040	135.302	0.0165
1130	1135	3000.000	120.439	0.0034	124.520	0.0216
1136	1141	2500.000	118.677	0.0035	113.378	0.0223
1142	1147	2000.000	116.768	0.0038	102.128	0.0225
1147	1152	1500.000	114.870	0.0038	93.866	0.0165
1153	1158	1000.000	112.908	0.0039	84.884	0.0180
1159	1204	500.000	110.925	0.0040	76.550	0.0167
		0.000	108.909	0.0040	68.252	0.0166

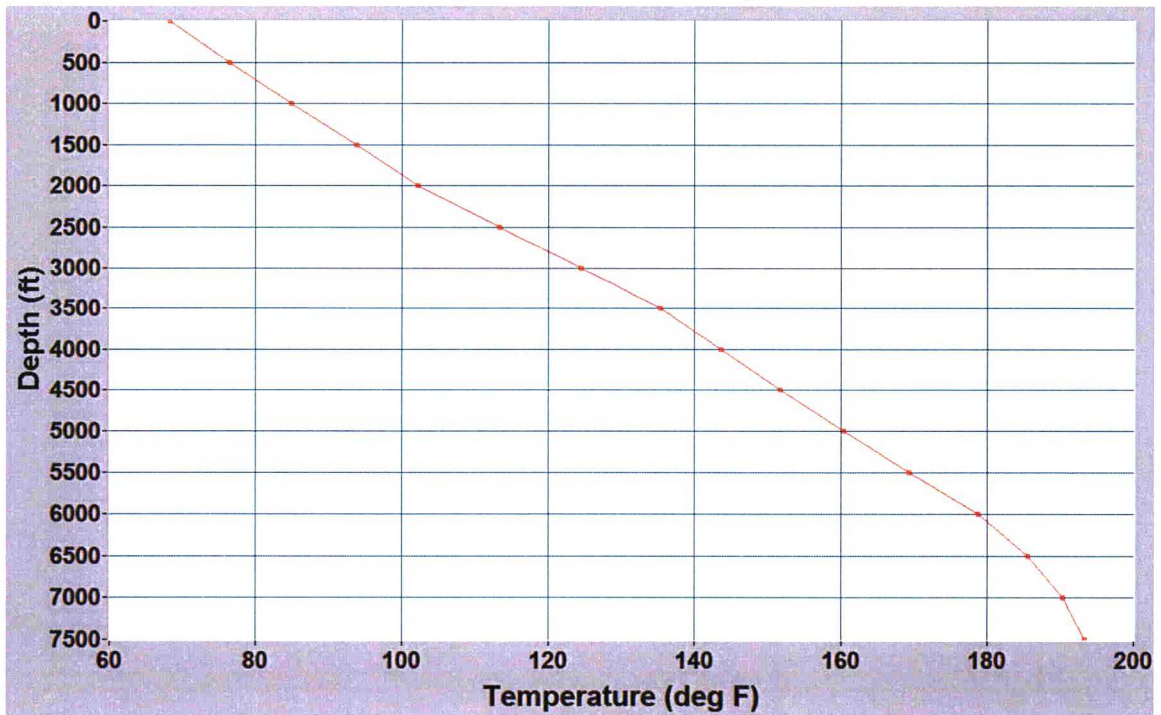
Extrapolated to MPP:

(ft)	(psig)	(deg F)
0.000		

W1162 Depth vs. Pressure



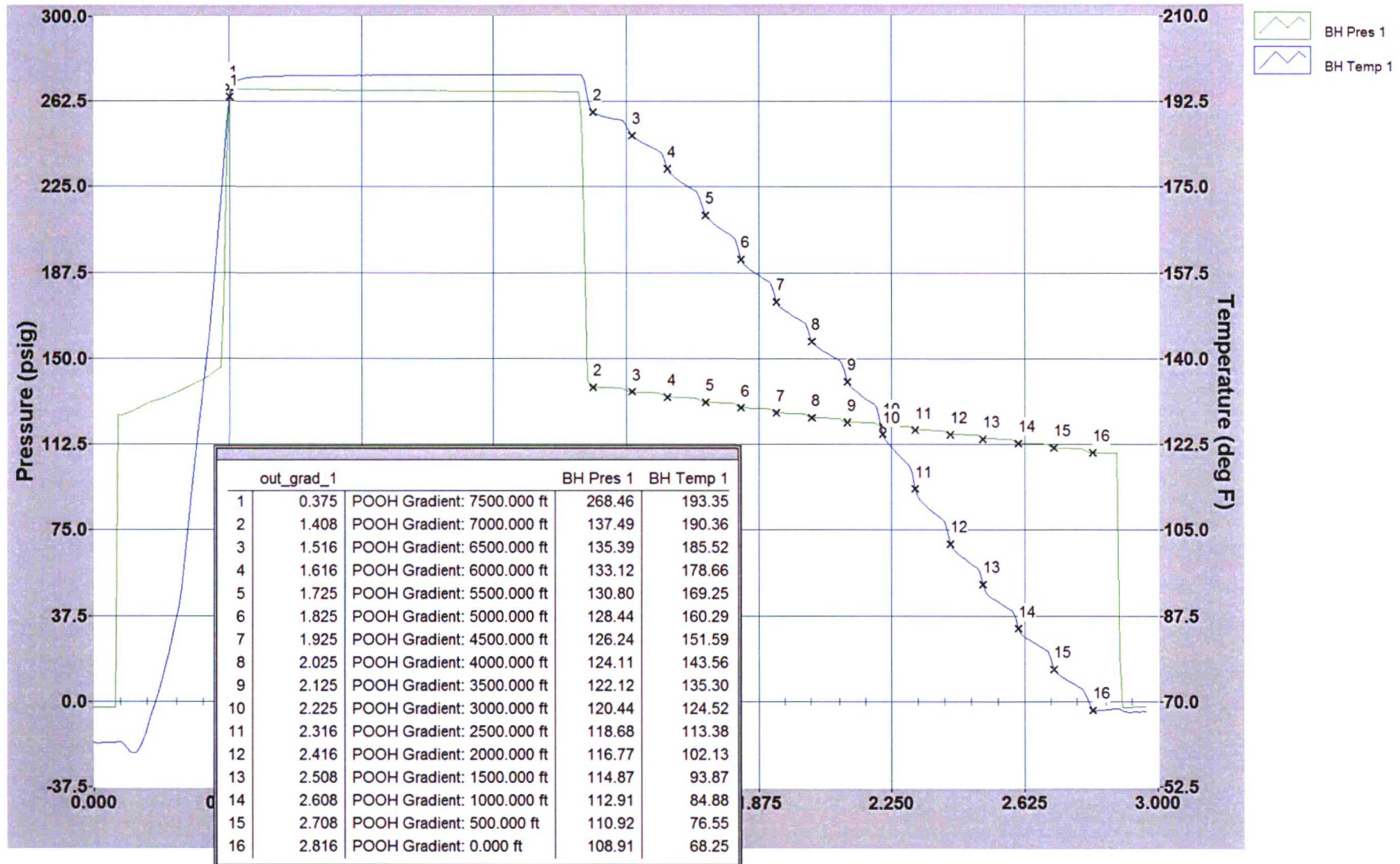
W1162 Depth vs. Temperature



Company Name HILCORP
 Well Name SAN JUAN 27-5 UNIT POW 916
 Type of Test POOH STATIC GRADIENT
 Date(s) of Test 5/24/19



SAN JUAN 27-5 POW #916



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/24	09:17:16	0.0000	-2.461	61.538
2019/05/24	09:18:45	0.0247	-2.595	61.538
2019/05/24	09:19:45	0.0414	-2.648	61.628
2019/05/24	09:20:15	0.0497	-2.598	61.628
2019/05/24	09:21:45	0.0747	125.188	61.754
2019/05/24	09:22:45	0.0914	125.922	60.386
2019/05/24	09:23:45	0.1081	126.957	59.396
2019/05/24	09:24:15	0.1164	127.577	59.540
2019/05/24	09:25:45	0.1414	129.902	63.356
2019/05/24	09:26:45	0.1581	131.000	67.424
2019/05/24	09:27:15	0.1664	131.345	69.224
2019/05/24	09:28:15	0.1831	132.183	73.112
2019/05/24	09:29:45	0.2081	133.564	80.258
2019/05/24	09:30:45	0.2247	134.765	85.928
2019/05/24	09:31:15	0.2331	135.410	89.150
2019/05/24	09:32:45	0.2581	137.349	104.648
2019/05/24	09:33:45	0.2747	138.617	116.384
2019/05/24	09:34:45	0.2914	139.937	127.238
2019/05/24	09:35:15	0.2997	140.616	132.350
2019/05/24	09:36:45	0.3247	143.302	151.178
2019/05/24	09:37:45	0.3414	145.329	165.200
2019/05/24	09:38:15	0.3497	146.033	172.418
2019/05/24	09:39:15	0.3664	236.716	187.952
POOH Gradient: 7500.000 ft				
2019/05/24	09:39:45	0.3747	268.458	193.352
2019/05/24	09:40:45	0.3914	268.117	196.484
2019/05/24	09:41:45	0.4081	267.991	197.132
2019/05/24	09:42:15	0.4164	267.954	197.276
2019/05/24	09:43:45	0.4414	267.888	197.474
2019/05/24	09:44:45	0.4581	267.814	197.546
2019/05/24	09:45:45	0.4747	267.769	197.600
2019/05/24	09:46:15	0.4831	267.782	197.618
2019/05/24	09:47:45	0.5081	267.660	197.690
2019/05/24	09:48:45	0.5247	267.685	197.726
2019/05/24	09:49:15	0.5331	267.624	197.744
2019/05/24	09:50:15	0.5497	267.602	197.762
2019/05/24	09:51:45	0.5747	267.569	197.798
2019/05/24	09:52:45	0.5914	267.564	197.816
2019/05/24	09:53:15	0.5997	267.576	197.816
2019/05/24	09:54:45	0.6247	267.525	197.834
2019/05/24	09:55:45	0.6414	267.476	197.852
2019/05/24	09:56:15	0.6497	267.461	197.852
2019/05/24	09:57:45	0.6747	267.435	197.870
2019/05/24	09:58:45	0.6914	267.423	197.870
2019/05/24	09:59:15	0.6997	267.434	197.888
2019/05/24	10:00:45	0.7247	267.363	197.888
2019/05/24	10:01:45	0.7414	267.351	197.906
2019/05/24	10:02:45	0.7581	267.370	197.888
2019/05/24	10:03:15	0.7664	267.329	197.906
2019/05/24	10:04:45	0.7914	267.320	197.906
2019/05/24	10:05:45	0.8081	267.294	197.906
2019/05/24	10:06:15	0.8164	267.287	197.906
2019/05/24	10:07:15	0.8331	267.270	197.924
2019/05/24	10:08:45	0.8581	267.232	197.924

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/24	10:09:45	0.8747	267.238	197.924
2019/05/24	10:10:15	0.8831	267.203	197.924
2019/05/24	10:11:45	0.9081	267.203	197.924
2019/05/24	10:12:45	0.9247	267.155	197.924
2019/05/24	10:13:45	0.9414	267.206	197.942
2019/05/24	10:14:15	0.9497	267.196	197.942
2019/05/24	10:15:45	0.9747	267.154	197.924
2019/05/24	10:16:45	0.9914	267.151	197.924
2019/05/24	10:17:15	0.9997	267.128	197.942
2019/05/24	10:18:45	1.0247	267.080	197.924
2019/05/24	10:19:45	1.0414	267.051	197.942
2019/05/24	10:20:15	1.0497	267.052	197.942
2019/05/24	10:21:45	1.0747	267.041	197.942
2019/05/24	10:22:45	1.0914	267.032	197.942
2019/05/24	10:23:15	1.0997	267.035	197.942
2019/05/24	10:24:15	1.1164	266.996	197.942
2019/05/24	10:25:45	1.1414	266.962	197.942
2019/05/24	10:26:45	1.1581	266.942	197.960
2019/05/24	10:27:15	1.1664	266.943	197.942
2019/05/24	10:28:45	1.1914	266.923	197.942
2019/05/24	10:29:45	1.2081	266.909	197.942
2019/05/24	10:30:45	1.2247	266.880	197.960
2019/05/24	10:31:15	1.2331	266.878	197.942
2019/05/24	10:32:45	1.2581	266.852	197.960
2019/05/24	10:33:45	1.2747	266.848	197.960
2019/05/24	10:34:15	1.2831	266.827	197.942
2019/05/24	10:35:15	1.2997	266.829	197.960
2019/05/24	10:36:45	1.3247	266.801	197.960
2019/05/24	10:37:45	1.3414	266.790	197.942
2019/05/24	10:38:15	1.3497	266.759	197.942
2019/05/24	10:39:45	1.3747	255.396	197.960
2019/05/24	10:40:45	1.3914	141.093	193.514
2019/05/24	10:41:15	1.3997	137.657	191.264
POOH Gradient: 7000.000 ft				
2019/05/24	10:41:45	1.4081	137.487	190.364
2019/05/24	10:42:45	1.4247	137.433	189.698
2019/05/24	10:43:45	1.4414	137.367	189.356
2019/05/24	10:44:15	1.4497	137.316	189.194
2019/05/24	10:45:45	1.4747	137.155	188.798
2019/05/24	10:46:45	1.4914	136.814	188.528
2019/05/24	10:47:45	1.5081	135.429	186.692
POOH Gradient: 6500.000 ft				
2019/05/24	10:48:15	1.5164	135.394	185.522
2019/05/24	10:49:45	1.5414	135.277	184.208
2019/05/24	10:50:45	1.5581	135.132	183.542
2019/05/24	10:51:15	1.5664	135.114	183.254
2019/05/24	10:52:15	1.5831	135.011	182.714
2019/05/24	10:53:45	1.6081	133.609	180.536
POOH Gradient: 6000.000 ft				
2019/05/24	10:54:15	1.6164	133.116	178.664
2019/05/24	10:54:45	1.6247	133.142	177.764
2019/05/24	10:55:15	1.6331	133.084	177.224
2019/05/24	10:56:45	1.6581	132.929	175.856
2019/05/24	10:57:45	1.6747	132.836	175.064

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Type of Test POOH STATIC GRADIENT
Date(s) of Test 5/24/19



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/24	10:58:45	1.6914	132.708	174.344
2019/05/24	10:59:15	1.6997	132.433	174.002
POOH Gradient: 5500.000 ft				
2019/05/24	11:00:45	1.7247	130.796	169.250
2019/05/24	11:01:45	1.7414	130.756	168.008
2019/05/24	11:02:15	1.7497	130.718	167.504
2019/05/24	11:03:15	1.7664	130.605	166.568
2019/05/24	11:04:45	1.7914	130.379	165.326
2019/05/24	11:05:45	1.8081	129.768	164.282
2019/05/24	11:06:15	1.8164	128.965	162.554
POOH Gradient: 5000.000 ft				
2019/05/24	11:06:45	1.8247	128.444	160.286
2019/05/24	11:07:45	1.8414	128.453	158.720
2019/05/24	11:08:45	1.8581	128.355	157.802
2019/05/24	11:09:45	1.8747	128.251	156.938
2019/05/24	11:10:15	1.8831	128.157	156.542
2019/05/24	11:11:45	1.9081	127.851	155.408
POOH Gradient: 4500.000 ft				
2019/05/24	11:12:45	1.9247	126.235	151.592
2019/05/24	11:13:15	1.9331	126.251	150.656
2019/05/24	11:14:15	1.9497	126.186	149.738
2019/05/24	11:15:45	1.9747	126.031	148.568
2019/05/24	11:16:45	1.9914	125.935	147.848
2019/05/24	11:17:15	1.9997	125.896	147.488
POOH Gradient: 4000.000 ft				
2019/05/24	11:18:45	2.0247	124.106	143.564
2019/05/24	11:19:45	2.0414	124.132	142.286
2019/05/24	11:20:45	2.0581	124.026	141.512
2019/05/24	11:21:15	2.0664	124.016	141.152
2019/05/24	11:22:45	2.0914	123.868	140.108
2019/05/24	11:23:45	2.1081	123.421	139.388
2019/05/24	11:24:15	2.1164	122.434	137.588
POOH Gradient: 3500.000 ft				
2019/05/24	11:24:45	2.1247	122.120	135.302
2019/05/24	11:25:45	2.1414	122.188	133.880
2019/05/24	11:26:45	2.1581	122.161	132.890
2019/05/24	11:27:15	2.1664	122.119	132.422
2019/05/24	11:28:45	2.1914	122.090	131.108
2019/05/24	11:29:45	2.2081	121.440	130.028
2019/05/24	11:30:15	2.2164	120.412	127.238
POOH Gradient: 3000.000 ft				
2019/05/24	11:30:45	2.2247	120.439	124.520
2019/05/24	11:31:15	2.2331	120.500	123.458
2019/05/24	11:32:45	2.2581	120.505	121.280
2019/05/24	11:33:45	2.2747	120.419	119.984
2019/05/24	11:34:15	2.2831	120.406	119.354
2019/05/24	11:35:45	2.3081	119.430	116.636
POOH Gradient: 2500.000 ft				
2019/05/24	11:36:15	2.3164	118.677	113.378
2019/05/24	11:36:45	2.3247	118.729	111.722
2019/05/24	11:37:45	2.3414	118.755	110.336
2019/05/24	11:38:15	2.3497	118.699	109.760
2019/05/24	11:39:45	2.3747	118.618	108.176
2019/05/24	11:40:45	2.3914	118.545	107.186

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/24	11:41:15	2.3997	118.348	106.700
POOH Gradient: 2000.000 ft				
2019/05/24	11:42:15	2.4164	116.768	102.128
2019/05/24	11:43:45	2.4414	116.853	99.950
2019/05/24	11:44:45	2.4581	116.766	98.978
2019/05/24	11:45:15	2.4664	116.734	98.510
2019/05/24	11:46:45	2.4914	116.613	97.196
POOH Gradient: 1500.000 ft				
2019/05/24	11:47:45	2.5081	114.870	93.866
2019/05/24	11:48:15	2.5164	114.897	92.210
2019/05/24	11:49:45	2.5414	114.909	90.698
2019/05/24	11:50:45	2.5581	114.797	89.924
2019/05/24	11:51:15	2.5664	114.738	89.546
2019/05/24	11:52:45	2.5914	114.574	88.466
POOH Gradient: 1000.000 ft				
2019/05/24	11:53:45	2.6081	112.908	84.884
2019/05/24	11:54:45	2.6247	112.903	83.228
2019/05/24	11:55:15	2.6331	112.947	82.796
2019/05/24	11:56:45	2.6581	112.794	81.644
2019/05/24	11:57:45	2.6747	112.722	80.906
2019/05/24	11:58:15	2.6831	112.646	80.564
2019/05/24	11:59:15	2.6997	111.376	78.638
POOH Gradient: 500.000 ft				
2019/05/24	11:59:45	2.7081	110.925	76.550
2019/05/24	12:00:45	2.7247	110.970	75.290
2019/05/24	12:01:45	2.7414	110.874	74.516
2019/05/24	12:02:15	2.7497	110.832	74.120
2019/05/24	12:03:45	2.7747	110.709	73.058
2019/05/24	12:04:45	2.7914	110.372	72.356
2019/05/24	12:05:45	2.8081	108.899	69.170
POOH Gradient: 0.000 ft				
2019/05/24	12:06:15	2.8164	108.909	68.252
2019/05/24	12:07:45	2.8414	108.852	68.216
2019/05/24	12:08:45	2.8581	108.757	68.324
2019/05/24	12:09:15	2.8664	108.726	68.396
2019/05/24	12:10:45	2.8914	19.595	68.540
2019/05/24	12:11:45	2.9081	-2.615	67.892
2019/05/24	12:12:15	2.9164	-2.625	67.748
2019/05/24	12:13:45	2.9414	-2.358	67.856
2019/05/24	12:14:45	2.9581	-2.173	68.018