

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	SAN JUAN 31-6 #229 POW
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	6/4/20
Dead-weight Gauge Tubing Pressure	155
Dead-weight Gauge Casing Pressure	
Shut-in Date (Duration)	
Date / Time on Bottom	6/4/20 @1429
Date / Time off Bottom	6/4/20 @1529
Probe Serial Number	
Probe Offset from End of Tool String	0-6000
Run Depth at Probe Pressure Port	3312

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure	158.2 psig
Maximum Recorded Probe Temperature	114.7 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 31-6 #229 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 6/4/20



PROBE INFORMATION

Probe Serial Number

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 31-6 #229 POW
Type of Test	POOH STATIC GRADIENT
Date(s) of Test	6/4/20



COMMENTS

Reported By

EXPERT DOWNHOLE SERVICES, INC.

RIH WITH 1.50 IMPRESSION BLOCK, TAGGED FILL @3316 WLM. RAN BHP GAUGES TO 3312 WLM FOR 1 HOUR, THEN POOH MAKING 5 MINUTE STOPS PER REQUEST.

Company Name HILCORP
Well Name SAN JUAN 31-6 #229 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 6/4/20



Pressure vs. Depth

Probe Serial Number

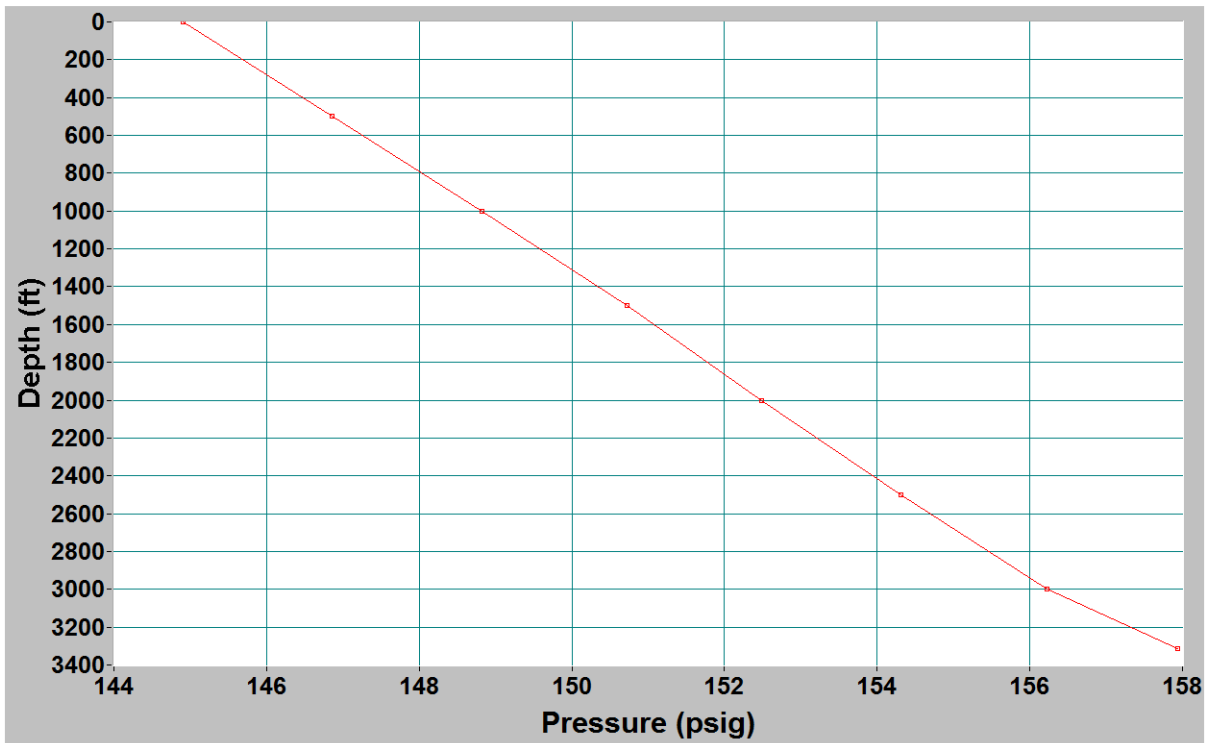
		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
1429	1529	3312.000	157.941	-	97.345	-
1530	1535	3000.000	156.225	0.0055	113.553	-0.0519
1536	1541	2500.000	154.307	0.0038	108.106	0.0109
1543	1548	2000.000	152.492	0.0036	100.659	0.0149
1549	1554	1500.000	150.720	0.0035	92.505	0.0163
1555	1600	1000.000	148.822	0.0038	83.772	0.0175
1601	1606	500.000	146.853	0.0039	75.470	0.0166
1608	1613	0.000	144.902	0.0039	68.049	0.0148

Extrapolated to MPP:

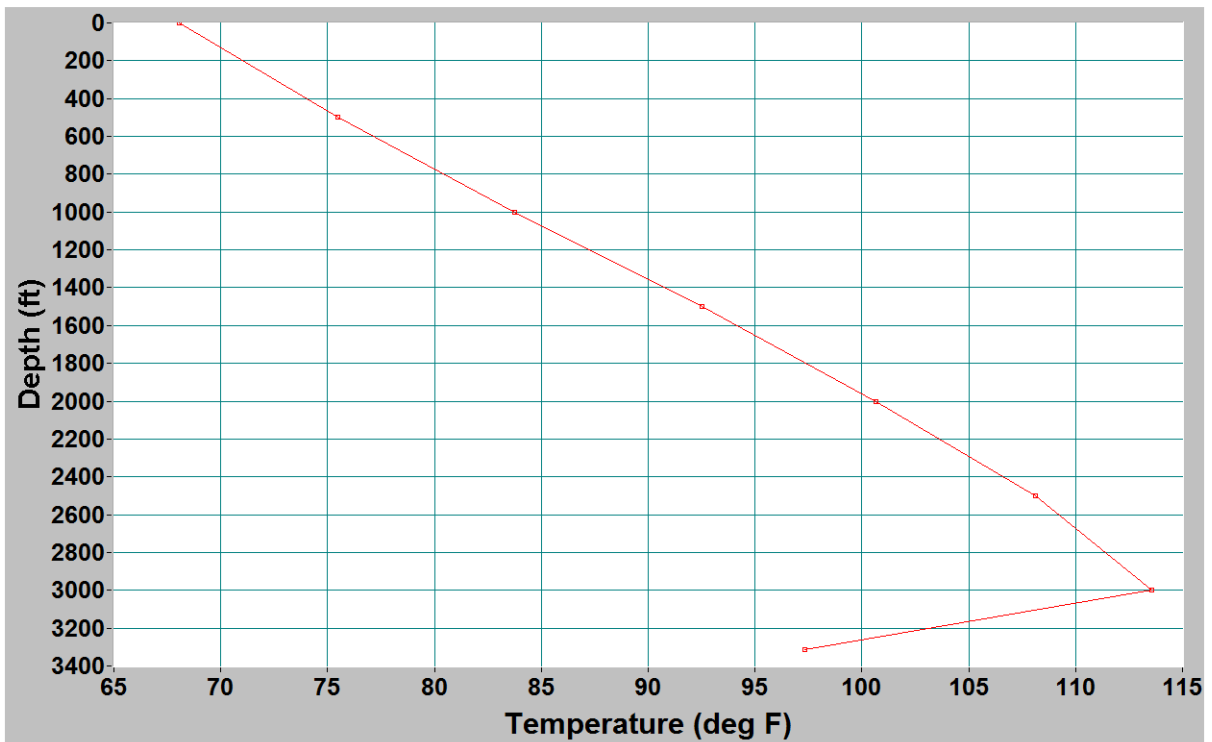
(ft)	(psig)	(deg F)
0.000		

Probe Serial Number

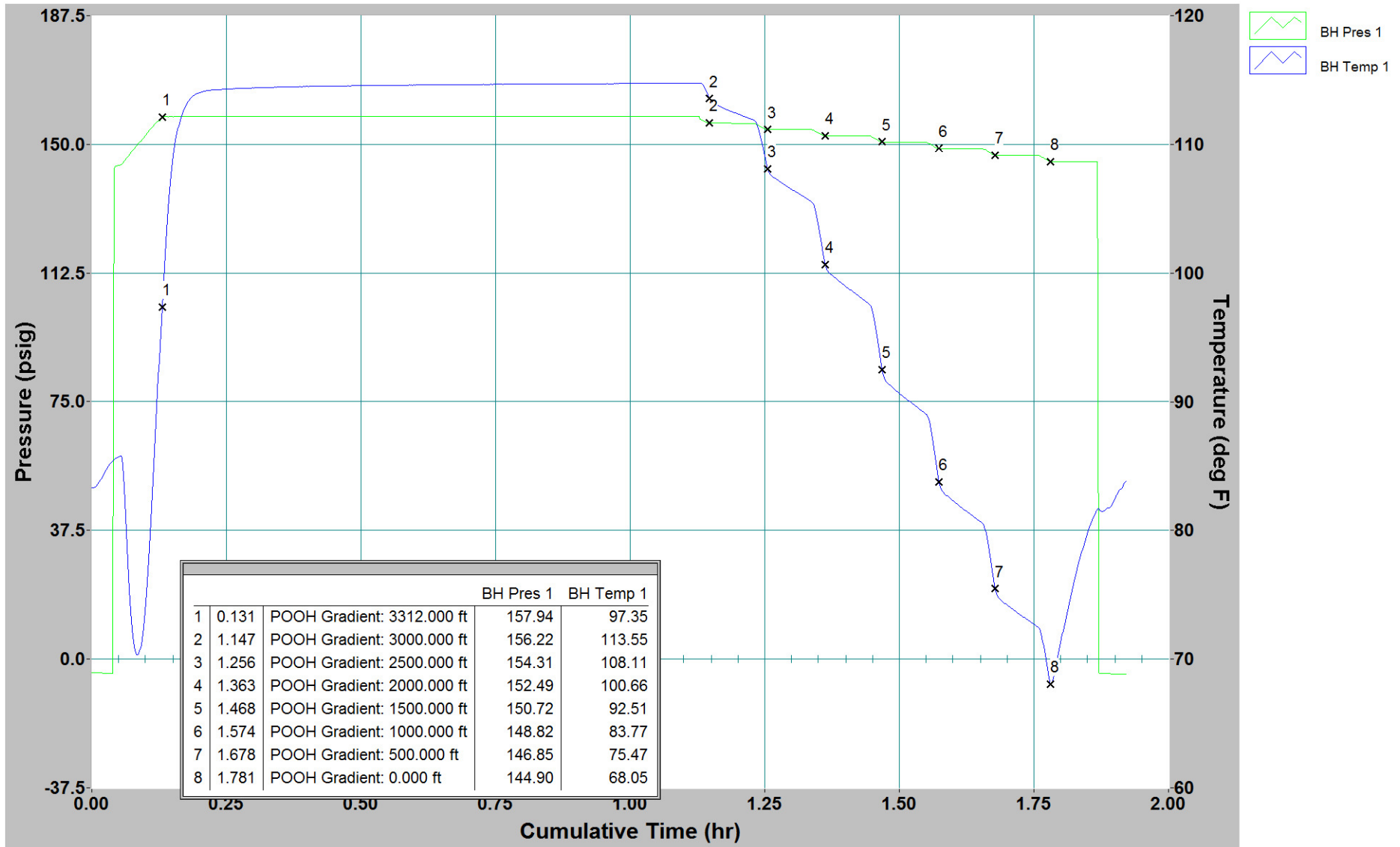
Depth vs. Pressure



Depth vs. Temperature



SAN JUAN 31-6 #229 POW 2020



Company Name HILCORP
Well Name SAN JUAN 31-6 #229 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 6/4/20



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2020/06/04	02:21:20	0.0000	-3.934	83.316
2020/06/04	02:21:50	0.0083	-3.980	83.449
2020/06/04	02:22:20	0.0167	-4.036	83.950
2020/06/04	02:22:50	0.0250	-4.097	84.585
2020/06/04	02:23:20	0.0333	-4.115	85.167
2020/06/04	02:23:50	0.0417	142.801	85.491
2020/06/04	02:24:20	0.0500	143.827	85.714
2020/06/04	02:24:50	0.0583	144.768	84.285
2020/06/04	02:25:20	0.0667	146.410	77.569
2020/06/04	02:25:50	0.0750	148.043	72.345
2020/06/04	02:26:20	0.0833	149.519	70.371
2020/06/04	02:26:50	0.0917	151.096	71.143
2020/06/04	02:27:20	0.1000	152.748	74.394
2020/06/04	02:27:50	0.1083	154.370	79.660
2020/06/04	02:28:20	0.1167	155.817	86.151
2020/06/04	02:28:50	0.1250	156.847	93.198
POOH Gradient: 3312.000 ft				
2020/06/04	02:29:10	0.1306	157.941	97.345
2020/06/04	02:29:20	0.1333	158.033	99.423
2020/06/04	02:29:50	0.1417	158.022	104.968
2020/06/04	02:30:20	0.1500	158.113	108.658
2020/06/04	02:30:50	0.1583	158.093	110.894
2020/06/04	02:31:20	0.1667	158.147	112.224
2020/06/04	02:31:50	0.1750	158.167	113.036
2020/06/04	02:32:20	0.1833	158.184	113.553
2020/06/04	02:32:50	0.1917	158.182	113.855
2020/06/04	02:33:20	0.2000	158.179	114.026
2020/06/04	02:33:50	0.2083	158.181	114.127
2020/06/04	02:34:20	0.2167	158.193	114.184
2020/06/04	02:34:50	0.2250	158.215	114.233
2020/06/04	02:35:20	0.2333	158.210	114.258
2020/06/04	02:35:50	0.2417	158.197	114.269
2020/06/04	02:36:20	0.2500	158.201	114.292
2020/06/04	02:36:50	0.2583	158.212	114.314
2020/06/04	02:37:20	0.2667	158.210	114.337
2020/06/04	02:37:50	0.2750	158.230	114.352
2020/06/04	02:38:20	0.2833	158.227	114.359
2020/06/04	02:38:50	0.2917	158.218	114.361
2020/06/04	02:39:20	0.3000	158.202	114.381
2020/06/04	02:39:50	0.3083	158.196	114.388
2020/06/04	02:40:20	0.3167	158.210	114.402
2020/06/04	02:40:50	0.3250	158.214	114.420
2020/06/04	02:41:20	0.3333	158.208	114.429
2020/06/04	02:41:50	0.3417	158.201	114.435
2020/06/04	02:42:20	0.3500	158.192	114.449
2020/06/04	02:42:50	0.3583	158.183	114.458
2020/06/04	02:43:20	0.3667	158.193	114.474
2020/06/04	02:43:50	0.3750	158.200	114.471
2020/06/04	02:44:20	0.3833	158.207	114.485
2020/06/04	02:44:50	0.3917	158.207	114.490
2020/06/04	02:45:20	0.4000	158.204	114.492
2020/06/04	02:45:50	0.4083	158.207	114.498
2020/06/04	02:46:20	0.4167	158.214	114.507
2020/06/04	02:46:50	0.4250	158.222	114.519

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2020/06/04	02:47:20	0.4333	158.225	114.516
2020/06/04	02:47:50	0.4417	158.228	114.521
2020/06/04	02:48:20	0.4500	158.225	114.526
2020/06/04	02:48:50	0.4583	158.219	114.534
2020/06/04	02:49:20	0.4667	158.219	114.539
2020/06/04	02:49:50	0.4750	158.219	114.539
2020/06/04	02:50:20	0.4833	158.226	114.548
2020/06/04	02:50:50	0.4917	158.220	114.553
2020/06/04	02:51:20	0.5000	158.220	114.557
2020/06/04	02:51:50	0.5083	158.220	114.559
2020/06/04	02:52:20	0.5167	158.214	114.571
2020/06/04	02:52:50	0.5250	158.218	114.580
2020/06/04	02:53:20	0.5333	158.214	114.579
2020/06/04	02:53:50	0.5417	158.211	114.579
2020/06/04	02:54:20	0.5500	158.215	114.586
2020/06/04	02:54:50	0.5583	158.208	114.588
2020/06/04	02:55:20	0.5667	158.202	114.588
2020/06/04	02:55:50	0.5750	158.199	114.591
2020/06/04	02:56:20	0.5833	158.196	114.597
2020/06/04	02:56:50	0.5917	158.202	114.598
2020/06/04	02:57:20	0.6000	158.196	114.604
2020/06/04	02:57:50	0.6083	158.196	114.611
2020/06/04	02:58:20	0.6167	158.206	114.615
2020/06/04	02:58:50	0.6250	158.206	114.620
2020/06/04	02:59:20	0.6333	158.207	114.622
2020/06/04	02:59:50	0.6417	158.197	114.625
2020/06/04	03:00:20	0.6500	158.200	114.627
2020/06/04	03:00:50	0.6583	158.207	114.633
2020/06/04	03:01:20	0.6667	158.207	114.636
2020/06/04	03:01:50	0.6750	158.214	114.642
2020/06/04	03:02:20	0.6833	158.214	114.642
2020/06/04	03:02:50	0.6917	158.214	114.643
2020/06/04	03:03:20	0.7000	158.201	114.649
2020/06/04	03:03:50	0.7083	158.201	114.643
2020/06/04	03:04:20	0.7167	158.204	114.647
2020/06/04	03:04:50	0.7250	158.195	114.652
2020/06/04	03:05:20	0.7333	158.202	114.656
2020/06/04	03:05:50	0.7417	158.202	114.663
2020/06/04	03:06:20	0.7500	158.205	114.660
2020/06/04	03:06:50	0.7583	158.209	114.667
2020/06/04	03:07:20	0.7667	158.212	114.665
2020/06/04	03:07:50	0.7750	158.205	114.669
2020/06/04	03:08:20	0.7833	158.209	114.674
2020/06/04	03:08:50	0.7917	158.206	114.681
2020/06/04	03:09:20	0.8000	158.196	114.683
2020/06/04	03:09:50	0.8083	158.199	114.681
2020/06/04	03:10:20	0.8167	158.199	114.683
2020/06/04	03:10:50	0.8250	158.206	114.679
2020/06/04	03:11:20	0.8333	158.186	114.685
2020/06/04	03:11:50	0.8417	158.183	114.688
2020/06/04	03:12:20	0.8500	158.190	114.694
2020/06/04	03:12:50	0.8583	158.193	114.688
2020/06/04	03:13:20	0.8667	158.190	114.701
2020/06/04	03:13:50	0.8750	158.194	114.701

Company Name HILCORP
Well Name SAN JUAN 31-6 #229 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 6/4/20



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2020/06/04	03:14:20	0.8833	158.194	114.697
2020/06/04	03:14:50	0.8917	158.190	114.696
2020/06/04	03:15:20	0.9000	158.197	114.703
2020/06/04	03:15:50	0.9083	158.197	114.703
2020/06/04	03:16:20	0.9167	158.201	114.705
2020/06/04	03:16:50	0.9250	158.194	114.706
2020/06/04	03:17:20	0.9333	158.187	114.706
2020/06/04	03:17:50	0.9417	158.191	114.706
2020/06/04	03:18:20	0.9500	158.191	114.714
2020/06/04	03:18:50	0.9583	158.201	114.712
2020/06/04	03:19:20	0.9667	158.188	114.710
2020/06/04	03:19:50	0.9750	158.191	114.717
2020/06/04	03:20:20	0.9833	158.185	114.717
2020/06/04	03:20:50	0.9917	158.178	114.719
2020/06/04	03:21:20	1.0000	158.165	114.724
2020/06/04	03:21:50	1.0083	158.172	114.728
2020/06/04	03:22:20	1.0167	158.165	114.728
2020/06/04	03:22:50	1.0250	158.172	114.728
2020/06/04	03:23:20	1.0333	158.175	114.730
2020/06/04	03:23:50	1.0417	158.166	114.730
2020/06/04	03:24:20	1.0500	158.169	114.733
2020/06/04	03:24:50	1.0583	158.169	114.730
2020/06/04	03:25:20	1.0667	158.172	114.728
2020/06/04	03:25:50	1.0750	158.176	114.739
2020/06/04	03:26:20	1.0833	158.176	114.739
2020/06/04	03:26:50	1.0917	158.179	114.741
2020/06/04	03:27:20	1.1000	158.183	114.741
2020/06/04	03:27:50	1.1083	158.182	114.739
2020/06/04	03:28:20	1.1167	158.183	114.744
2020/06/04	03:28:50	1.1250	158.189	114.741
2020/06/04	03:29:20	1.1333	157.111	114.697
2020/06/04	03:29:50	1.1417	156.365	114.138
POOH Gradient: 3000.000 ft				
2020/06/04	03:30:10	1.1472	156.225	113.553
2020/06/04	03:30:20	1.1500	156.200	113.362
2020/06/04	03:30:50	1.1583	156.186	113.095
2020/06/04	03:31:20	1.1667	156.179	112.930
2020/06/04	03:31:50	1.1750	156.169	112.775
2020/06/04	03:32:20	1.1833	156.156	112.631
2020/06/04	03:32:50	1.1917	156.140	112.494
2020/06/04	03:33:20	1.2000	156.137	112.354
2020/06/04	03:33:50	1.2083	156.135	112.219
2020/06/04	03:34:20	1.2167	156.139	112.095
2020/06/04	03:34:50	1.2250	156.134	111.972
2020/06/04	03:35:20	1.2333	155.829	111.709
2020/06/04	03:35:50	1.2417	155.205	110.619
2020/06/04	03:36:20	1.2500	154.550	109.128
POOH Gradient: 2500.000 ft				
2020/06/04	03:36:40	1.2556	154.307	108.106
2020/06/04	03:36:50	1.2583	154.302	107.818
2020/06/04	03:37:20	1.2667	154.302	107.436
2020/06/04	03:37:50	1.2750	154.299	107.184
2020/06/04	03:38:20	1.2833	154.296	106.954
2020/06/04	03:38:50	1.2917	154.293	106.723

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2020/06/04	03:39:20	1.3000	154.297	106.504
2020/06/04	03:39:50	1.3083	154.285	106.288
2020/06/04	03:40:20	1.3167	154.283	106.068
2020/06/04	03:40:50	1.3250	154.281	105.859
2020/06/04	03:41:20	1.3333	154.282	105.651
2020/06/04	03:41:50	1.3417	153.988	105.174
2020/06/04	03:42:20	1.3500	153.233	103.534
2020/06/04	03:42:50	1.3583	152.643	101.563
POOH Gradient: 2000.000 ft				
2020/06/04	03:43:05	1.3625	152.492	100.659
2020/06/04	03:43:20	1.3667	152.481	100.222
2020/06/04	03:43:50	1.3750	152.476	99.822
2020/06/04	03:44:20	1.3833	152.461	99.527
2020/06/04	03:44:50	1.3917	152.454	99.255
2020/06/04	03:45:20	1.4000	152.453	98.978
2020/06/04	03:45:50	1.4083	152.446	98.713
2020/06/04	03:46:20	1.4167	152.451	98.445
2020/06/04	03:46:50	1.4250	152.438	98.190
2020/06/04	03:47:20	1.4333	152.451	97.934
2020/06/04	03:47:50	1.4417	152.451	97.687
2020/06/04	03:48:20	1.4500	151.984	96.980
2020/06/04	03:48:50	1.4583	151.374	95.099
2020/06/04	03:49:20	1.4667	150.736	92.856
POOH Gradient: 1500.000 ft				
2020/06/04	03:49:25	1.4681	150.720	92.505
2020/06/04	03:49:50	1.4750	150.678	91.641
2020/06/04	03:50:20	1.4833	150.653	91.238
2020/06/04	03:50:50	1.4917	150.635	90.936
2020/06/04	03:51:20	1.5000	150.624	90.648
2020/06/04	03:51:50	1.5083	150.608	90.372
2020/06/04	03:52:20	1.5167	150.604	90.102
2020/06/04	03:52:50	1.5250	150.603	89.829
2020/06/04	03:53:20	1.5333	150.599	89.564
2020/06/04	03:53:50	1.5417	150.602	89.305
2020/06/04	03:54:20	1.5500	150.589	89.049
2020/06/04	03:54:50	1.5583	149.908	87.841
2020/06/04	03:55:20	1.5667	149.172	85.654
POOH Gradient: 1000.000 ft				
2020/06/04	03:55:45	1.5736	148.822	83.772
2020/06/04	03:55:50	1.5750	148.814	83.543
2020/06/04	03:56:20	1.5833	148.783	82.900
2020/06/04	03:56:50	1.5917	148.764	82.569
2020/06/04	03:57:20	1.6000	148.756	82.287
2020/06/04	03:57:50	1.6083	148.745	82.015
2020/06/04	03:58:20	1.6167	148.738	81.739
2020/06/04	03:58:50	1.6250	148.727	81.475
2020/06/04	03:59:20	1.6333	148.714	81.212
2020/06/04	03:59:50	1.6417	148.716	80.955
2020/06/04	04:00:20	1.6500	148.719	80.706
2020/06/04	04:00:50	1.6583	148.483	80.294
2020/06/04	04:01:20	1.6667	147.703	78.417
2020/06/04	04:01:50	1.6750	146.952	76.143
POOH Gradient: 500.000 ft				
2020/06/04	04:02:00	1.6778	146.853	75.470

Company Name HILCORP
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Type of Test POOH STATIC GRADIENT
Date(s) of Test 6/4/20



Date	Time	Cum. Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2020/06/04	04:02:20	1.6833	146.841	74.865
2020/06/04	04:02:50	1.6917	146.844	74.491
2020/06/04	04:03:20	1.7000	146.839	74.206
2020/06/04	04:03:50	1.7083	146.841	73.944
2020/06/04	04:04:20	1.7167	146.833	73.690
2020/06/04	04:04:50	1.7250	146.829	73.440
2020/06/04	04:05:20	1.7333	146.831	73.191
2020/06/04	04:05:50	1.7417	146.824	72.946
2020/06/04	04:06:20	1.7500	146.817	72.711
2020/06/04	04:06:50	1.7583	146.814	72.477
2020/06/04	04:07:20	1.7667	146.126	71.359
2020/06/04	04:07:50	1.7750	145.302	69.265
POOH Gradient: 0.000 ft				
2020/06/04	04:08:10	1.7806	144.902	68.049
2020/06/04	04:08:20	1.7833	144.908	68.103
2020/06/04	04:08:50	1.7917	144.956	69.582
2020/06/04	04:09:20	1.8000	144.947	71.323
2020/06/04	04:09:50	1.8083	144.883	72.984
2020/06/04	04:10:20	1.8167	144.873	74.561
2020/06/04	04:10:50	1.8250	144.857	76.039
2020/06/04	04:11:20	1.8333	144.848	77.425
2020/06/04	04:11:50	1.8417	144.876	78.712
2020/06/04	04:12:20	1.8500	144.899	79.891
2020/06/04	04:12:50	1.8583	144.898	80.780
2020/06/04	04:13:20	1.8667	144.905	81.505
2020/06/04	04:13:50	1.8750	-4.161	81.498
2020/06/04	04:14:20	1.8833	-4.204	81.649
2020/06/04	04:14:50	1.8917	-4.259	81.783
2020/06/04	04:15:20	1.9000	-4.342	82.378
2020/06/04	04:15:50	1.9083	-4.371	83.050
2020/06/04	04:16:20	1.9167	-4.313	83.584