

SAN JUAN 32-7 UNIT 203
30-045-27458

MUC

Pressure Test Report

COMPANY INFORMATION

Company Name	Hilcorp
Representative	Priscilla Shorty
Phone	
Fax	
Address	

NMOC

MAY 30 2018

DISTRICT III

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

WELL INFORMATION

Well Name	San Juan 32-7 Unit #203
Well Location	T32N, R7W, Sec. 22
Field and Pool	Fruitland Coal
Status (Oil, Gas, Water, Injection)	Observation
Perforated Intervals	3205-3240
Mid-point of Perforated Intervals (MPP)	
Drilling Rig Number	
Elevations	
Kelly Bushing (KB)	13
Casing Flange (CF)	
KB-CF	
Ground Level	6624
Plug Back Total Depth	3305
Total Depth	3349
Production Casing	7 to 3349
Production Tubing	2 7/8 to 3288

TEST INFORMATION

Type of Test	POOH Static Gradient
Date(s) of Test	5/16/18
Dead-weight Gauge Tubing Pressure	40
Dead-weight Gauge Casing Pressure	
Shut-in Date (Duration)	
Date / Time on Bottom	5/16/18 @ 1222
Date / Time off Bottom	5/16/18 @ 1322
Probe Serial Number	W1036
Probe Offset from End of Tool String	0-6000
Run Depth at Probe Pressure Port	3200

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure	70.9 psig
Maximum Recorded Probe Temperature	115.4 deg F
Final Buildup Pressure	
Gradient Survey Information	
Extrapolated Pressure to MPP	
Final Gradient at Depth	
Job Number	

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

Hilcorp
San Juan 32-7 Unit #203
POOH Static Gradient
5/16/18



PROBE INFORMATION

Probe Serial Number W1036
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>
-------------	--------------------	---------------	-----------------	----------------

Program Start Time
Program End Time
Total Samples Taken
Usage for this Test
Generic Data File Name

Company Name	Hilcorp
Well Name	San Juan 32-7 Unit #203
Type of Test	POOH Static Gradient
Date(s) of Test	5/16/18



COMMENTS

Reported By

Expert Downhole Services, Inc.

RIH with 1.5 IB and tagged fill @3301 WLM. RIH with BHP gauge to 3200 for 1 hour, the POOH making 5 second stops per request.

Company Name Hilcorp
Well Name San Juan 32-7 Unit #203
Type of Test POOH Static Gradient
Date(s) of Test 5/16/18



Pressure vs. Depth

Probe Serial Number W1036

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
1222	1322	3200.000	70.828	-	97.284	-
1323	1328	3000.000	52.880	0.0897	114.647	-0.0868
1329	1334	2500.000	51.993	0.0018	112.258	0.0048
1336	1341	2000.000	51.273	0.0014	106.929	0.0107
1342	1347	1500.000	50.525	0.0015	100.036	0.0138
1348	1353	1000.000	49.822	0.0014	93.735	0.0126
1355	1400	500.000	49.069	0.0015	85.861	0.0157
1401	1406	0.000	48.540	0.0011	78.948	0.0138

Extrapolated to MPP:

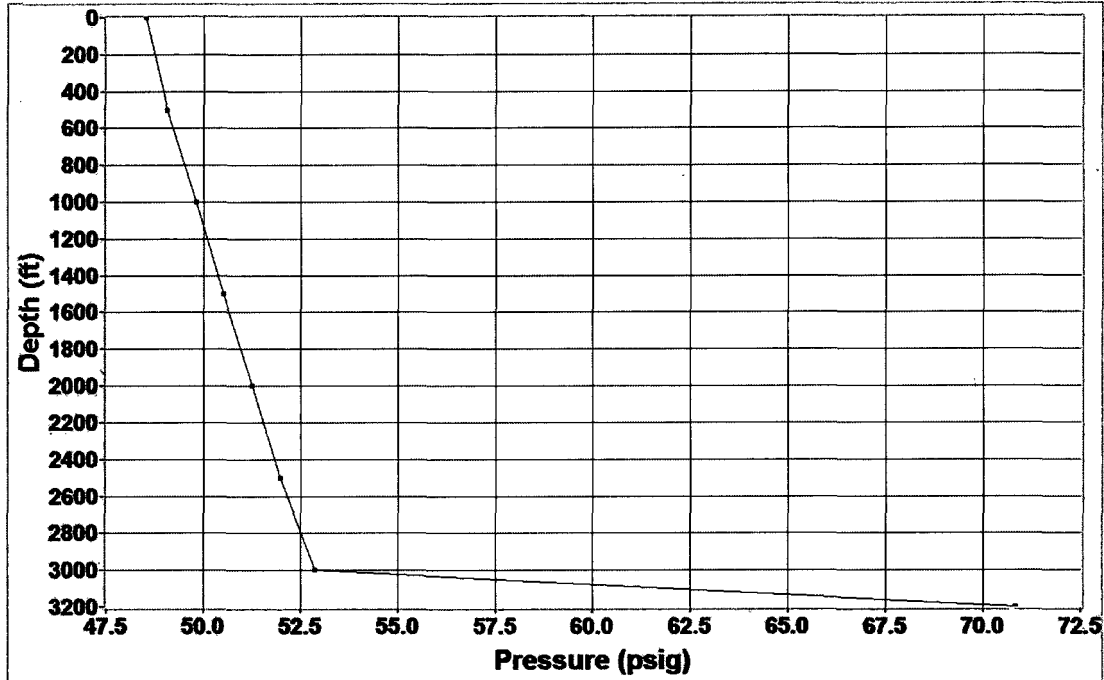
(ft)	(psig)	(deg F)
0.000		

Company Name Hilcorp
Well Name San Juan 32-7 Unit #203
Type of Test POOH Static Gradient
Date(s) of Test 5/16/18

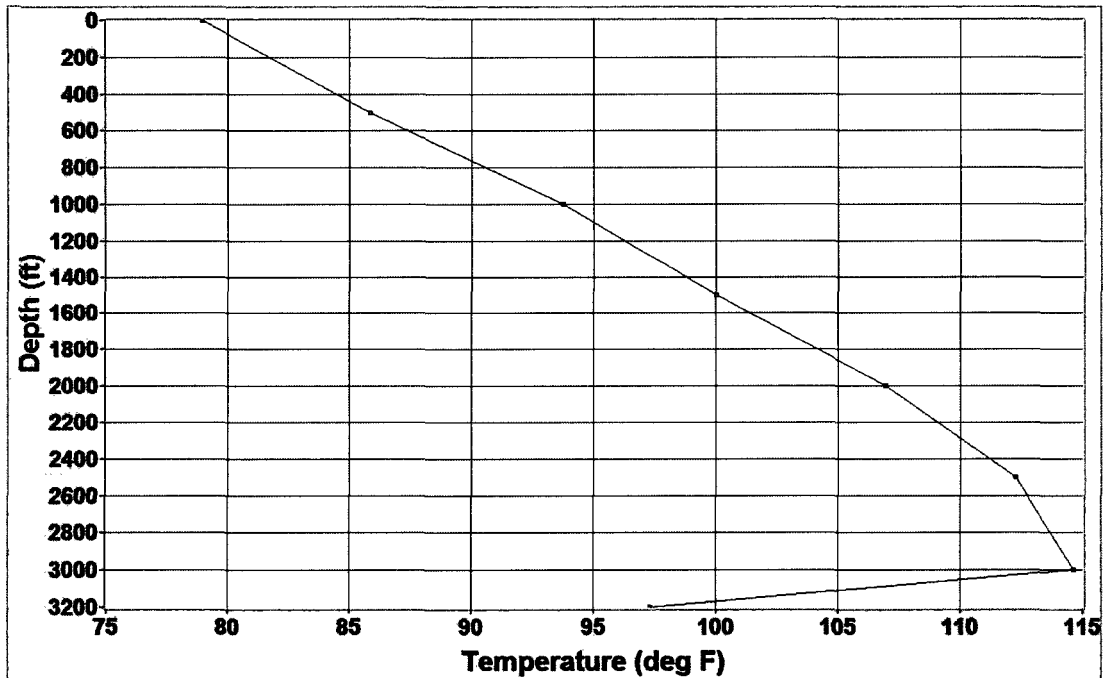


Probe Serial Number W1036

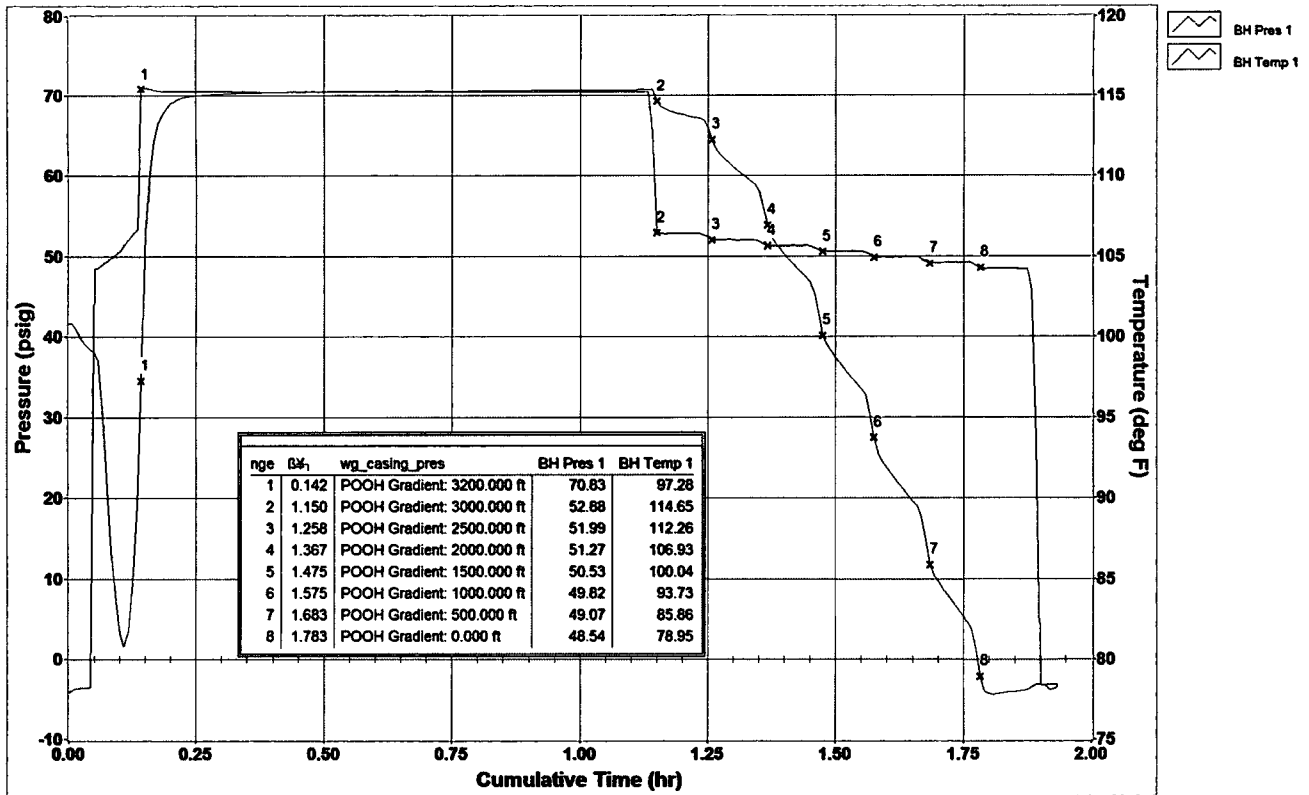
W1036 Depth vs. Pressure



W1036 Depth vs. Temperature



San Juan 32-7 Unit #203



Company Name Hilcorp
Well Name San Juan 32-7 Unit #203
Type of Test POOH Static Gradient
Date(s) of Test 5/16/18



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/16	12:14:17	0.0000	-4.154	100.796
2018/05/16	12:14:47	0.0083	-3.899	100.744
2018/05/16	12:15:17	0.0167	-3.687	100.292
2018/05/16	12:15:47	0.0250	-3.632	99.840
2018/05/16	12:16:17	0.0333	-3.608	99.498
2018/05/16	12:16:47	0.0417	-3.560	99.219
2018/05/16	12:17:17	0.0500	48.388	99.032
2018/05/16	12:17:47	0.0583	48.556	98.476
2018/05/16	12:18:17	0.0667	49.054	94.917
2018/05/16	12:18:47	0.0750	49.412	90.568
2018/05/16	12:19:17	0.0833	49.833	86.693
2018/05/16	12:19:47	0.0917	50.254	83.651
2018/05/16	12:20:17	0.1000	50.669	81.628
2018/05/16	12:20:47	0.1083	51.398	80.789
2018/05/16	12:21:17	0.1167	52.059	81.723
2018/05/16	12:21:47	0.1250	52.726	84.709
2018/05/16	12:22:17	0.1333	53.357	89.564
POOH Gradient: 3200.000 ft				
2018/05/16	12:22:47	0.1417	70.828	97.284
2018/05/16	12:23:17	0.1500	70.928	106.518
2018/05/16	12:23:47	0.1583	70.844	110.228
2018/05/16	12:24:17	0.1667	70.680	112.150
2018/05/16	12:24:47	0.1750	70.591	113.198
2018/05/16	12:25:17	0.1833	70.536	113.824
2018/05/16	12:25:47	0.1917	70.542	114.219
2018/05/16	12:26:17	0.2000	70.532	114.508
2018/05/16	12:26:47	0.2083	70.519	114.687
2018/05/16	12:27:17	0.2167	70.508	114.802
2018/05/16	12:27:47	0.2250	70.503	114.883
2018/05/16	12:28:17	0.2333	70.502	114.931
2018/05/16	12:28:47	0.2417	70.495	114.975
2018/05/16	12:29:17	0.2500	70.493	114.998
2018/05/16	12:29:47	0.2583	70.493	115.027
2018/05/16	12:30:17	0.2667	70.492	115.039
2018/05/16	12:30:47	0.2750	70.490	115.063
2018/05/16	12:31:17	0.2833	70.491	115.090
2018/05/16	12:31:47	0.2917	70.487	115.097
2018/05/16	12:32:17	0.3000	70.486	115.111
2018/05/16	12:32:47	0.3083	70.484	115.133
2018/05/16	12:33:17	0.3167	70.483	115.146
2018/05/16	12:33:47	0.3250	70.479	115.155
2018/05/16	12:34:17	0.3333	70.478	115.160
2018/05/16	12:34:47	0.3417	70.480	115.173
2018/05/16	12:35:17	0.3500	70.477	115.180
2018/05/16	12:35:47	0.3583	70.473	115.189
2018/05/16	12:36:17	0.3667	70.469	115.196
2018/05/16	12:36:47	0.3750	70.470	115.191
2018/05/16	12:37:17	0.3833	70.472	115.200
2018/05/16	12:37:47	0.3917	70.475	115.200
2018/05/16	12:38:17	0.4000	70.471	115.209
2018/05/16	12:38:47	0.4083	70.468	115.216
2018/05/16	12:39:17	0.4167	70.464	115.228
2018/05/16	12:39:47	0.4250	70.467	115.228
2018/05/16	12:40:17	0.4333	70.463	115.243

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/16	12:40:47	0.4417	70.460	115.241
2018/05/16	12:41:17	0.4500	70.457	115.243
2018/05/16	12:41:47	0.4583	70.456	115.246
2018/05/16	12:42:17	0.4667	70.456	115.248
2018/05/16	12:42:47	0.4750	70.459	115.250
2018/05/16	12:43:17	0.4833	70.456	115.254
2018/05/16	12:43:47	0.4917	70.453	115.248
2018/05/16	12:44:17	0.5000	70.455	115.261
2018/05/16	12:44:47	0.5083	70.452	115.264
2018/05/16	12:45:17	0.5167	70.453	115.255
2018/05/16	12:45:47	0.5250	70.450	115.250
2018/05/16	12:46:17	0.5333	70.448	115.252
2018/05/16	12:46:47	0.5417	70.450	115.259
2018/05/16	12:47:17	0.5500	70.452	115.263
2018/05/16	12:47:47	0.5583	70.455	115.266
2018/05/16	12:48:17	0.5667	70.452	115.263
2018/05/16	12:48:47	0.5750	70.449	115.261
2018/05/16	12:49:17	0.5833	70.446	115.264
2018/05/16	12:49:47	0.5917	70.444	115.264
2018/05/16	12:50:17	0.6000	70.444	115.261
2018/05/16	12:50:47	0.6083	70.444	115.259
2018/05/16	12:51:17	0.6167	70.440	115.268
2018/05/16	12:51:47	0.6250	70.437	115.270
2018/05/16	12:52:17	0.6333	70.439	115.279
2018/05/16	12:52:47	0.6417	70.436	115.284
2018/05/16	12:53:17	0.6500	70.434	115.275
2018/05/16	12:53:47	0.6583	70.438	115.266
2018/05/16	12:54:17	0.6667	70.435	115.266
2018/05/16	12:54:47	0.6750	70.431	115.275
2018/05/16	12:55:17	0.6833	70.431	115.281
2018/05/16	12:55:47	0.6917	70.434	115.277
2018/05/16	12:56:17	0.7000	70.430	115.288
2018/05/16	12:56:47	0.7083	70.427	115.290
2018/05/16	12:57:17	0.7167	70.426	115.273
2018/05/16	12:57:47	0.7250	70.422	115.279
2018/05/16	12:58:17	0.7333	70.423	115.275
2018/05/16	12:58:47	0.7417	70.423	115.272
2018/05/16	12:59:17	0.7500	70.420	115.270
2018/05/16	12:59:47	0.7583	70.423	115.277
2018/05/16	13:00:17	0.7667	70.420	115.273
2018/05/16	13:00:47	0.7750	70.417	115.281
2018/05/16	13:01:17	0.7833	70.419	115.284
2018/05/16	13:01:47	0.7917	70.416	115.284
2018/05/16	13:02:17	0.8000	70.416	115.288
2018/05/16	13:02:47	0.8083	70.415	115.293
2018/05/16	13:03:17	0.8167	70.418	115.295
2018/05/16	13:03:47	0.8250	70.418	115.299
2018/05/16	13:04:17	0.8333	70.418	115.300
2018/05/16	13:04:47	0.8417	70.417	115.311
2018/05/16	13:05:17	0.8500	70.414	115.306
2018/05/16	13:05:47	0.8583	70.417	115.313
2018/05/16	13:06:17	0.8667	70.417	115.313
2018/05/16	13:06:47	0.8750	70.413	115.322
2018/05/16	13:07:17	0.8833	70.416	115.318

Company Name Hilcorp
Well Name San Juan 32-7 Unit #203
Type of Test POOH Static Gradient
Date(s) of Test 5/16/18



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/16	13:07:47	0.8917	70.416	115.324
2018/05/16	13:08:17	0.9000	70.416	115.317
2018/05/16	13:08:47	0.9083	70.418	115.329
2018/05/16	13:09:17	0.9167	70.414	115.336
2018/05/16	13:09:47	0.9250	70.414	115.338
2018/05/16	13:10:17	0.9333	70.417	115.336
2018/05/16	13:10:47	0.9417	70.420	115.340
2018/05/16	13:11:17	0.9500	70.423	115.340
2018/05/16	13:11:47	0.9583	70.423	115.336
2018/05/16	13:12:17	0.9667	70.422	115.345
2018/05/16	13:12:47	0.9750	70.423	115.338
2018/05/16	13:13:17	0.9833	70.423	115.340
2018/05/16	13:13:47	0.9917	70.426	115.338
2018/05/16	13:14:17	1.0000	70.423	115.338
2018/05/16	13:14:47	1.0083	70.422	115.342
2018/05/16	13:15:17	1.0167	70.420	115.340
2018/05/16	13:15:47	1.0250	70.419	115.349
2018/05/16	13:16:17	1.0333	70.419	115.344
2018/05/16	13:16:47	1.0417	70.422	115.344
2018/05/16	13:17:17	1.0500	70.420	115.340
2018/05/16	13:17:47	1.0583	70.419	115.353
2018/05/16	13:18:17	1.0667	70.416	115.351
2018/05/16	13:18:47	1.0750	70.418	115.356
2018/05/16	13:19:17	1.0833	70.420	115.363
2018/05/16	13:19:47	1.0917	70.423	115.363
2018/05/16	13:20:17	1.1000	70.423	115.362
2018/05/16	13:20:47	1.1083	70.426	115.362
2018/05/16	13:21:17	1.1167	70.423	115.369
2018/05/16	13:21:47	1.1250	70.425	115.374
2018/05/16	13:22:17	1.1333	70.427	115.381
2018/05/16	13:22:47	1.1417	65.492	115.383
POOH Gradient: 3000.000 ft				
2018/05/16	13:23:17	1.1500	52.880	114.647
2018/05/16	13:23:47	1.1583	52.820	114.307
2018/05/16	13:24:17	1.1667	52.774	114.161
2018/05/16	13:24:47	1.1750	52.784	114.051
2018/05/16	13:25:17	1.1833	52.791	113.965
2018/05/16	13:25:47	1.1917	52.796	113.893
2018/05/16	13:26:17	1.2000	52.801	113.824
2018/05/16	13:26:47	1.2083	52.806	113.756
2018/05/16	13:27:17	1.2167	52.797	113.684
2018/05/16	13:27:47	1.2250	52.792	113.632
2018/05/16	13:28:17	1.2333	52.782	113.569
2018/05/16	13:28:47	1.2417	52.599	113.448
2018/05/16	13:29:17	1.2500	52.343	113.005
POOH Gradient: 2500.000 ft				
2018/05/16	13:29:47	1.2583	51.993	112.258
2018/05/16	13:30:17	1.2667	51.985	111.585
2018/05/16	13:30:47	1.2750	52.003	111.263
2018/05/16	13:31:17	1.2833	52.008	111.007
2018/05/16	13:31:47	1.2917	52.034	110.768
2018/05/16	13:32:17	1.3000	52.022	110.536
2018/05/16	13:32:47	1.3083	51.942	110.309
2018/05/16	13:33:17	1.3167	51.968	110.095

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/16	13:33:47	1.3250	51.991	109.875
2018/05/16	13:34:17	1.3333	51.985	109.666
2018/05/16	13:34:47	1.3417	52.007	109.459
2018/05/16	13:35:17	1.3500	51.855	109.045
2018/05/16	13:35:47	1.3583	51.487	108.118
POOH Gradient: 2000.000 ft				
2018/05/16	13:36:17	1.3667	51.273	106.929
2018/05/16	13:36:47	1.3750	51.226	106.160
2018/05/16	13:37:17	1.3833	51.224	105.777
2018/05/16	13:37:47	1.3917	51.264	105.442
2018/05/16	13:38:17	1.4000	51.250	105.132
2018/05/16	13:38:47	1.4083	51.241	104.832
2018/05/16	13:39:17	1.4167	51.276	104.535
2018/05/16	13:39:47	1.4250	51.218	104.241
2018/05/16	13:40:17	1.4333	51.241	103.959
2018/05/16	13:40:47	1.4417	51.274	103.674
2018/05/16	13:41:17	1.4500	51.240	103.399
2018/05/16	13:41:47	1.4583	50.940	102.668
2018/05/16	13:42:17	1.4667	50.690	101.399
POOH Gradient: 1500.000 ft				
2018/05/16	13:42:47	1.4750	50.525	100.036
2018/05/16	13:43:17	1.4833	50.523	99.451
2018/05/16	13:43:47	1.4917	50.526	99.061
2018/05/16	13:44:17	1.5000	50.572	98.703
2018/05/16	13:44:47	1.5083	50.597	98.357
2018/05/16	13:45:17	1.5167	50.529	98.024
2018/05/16	13:45:47	1.5250	50.566	97.693
2018/05/16	13:46:17	1.5333	50.588	97.372
2018/05/16	13:46:47	1.5417	50.546	97.056
2018/05/16	13:47:17	1.5500	50.586	96.748
2018/05/16	13:47:47	1.5583	50.420	96.372
2018/05/16	13:48:17	1.5667	50.175	95.205
POOH Gradient: 1000.000 ft				
2018/05/16	13:48:47	1.5750	49.822	93.735
2018/05/16	13:49:17	1.5833	49.800	92.685
2018/05/16	13:49:47	1.5917	49.847	92.228
2018/05/16	13:50:17	1.6000	49.830	91.850
2018/05/16	13:50:47	1.6083	49.800	91.492
2018/05/16	13:51:17	1.6167	49.847	91.152
2018/05/16	13:51:47	1.6250	49.823	90.811
2018/05/16	13:52:17	1.6333	49.870	90.471
2018/05/16	13:52:47	1.6417	49.899	90.144
2018/05/16	13:53:17	1.6500	49.904	89.814
2018/05/16	13:53:47	1.6583	49.881	89.492
2018/05/16	13:54:17	1.6667	49.644	88.783
2018/05/16	13:54:47	1.6750	49.311	87.363
POOH Gradient: 500.000 ft				
2018/05/16	13:55:17	1.6833	49.069	85.861
2018/05/16	13:55:47	1.6917	49.111	85.213
2018/05/16	13:56:17	1.7000	49.119	84.796
2018/05/16	13:56:47	1.7083	49.138	84.407
2018/05/16	13:57:17	1.7167	49.192	84.042
2018/05/16	13:57:47	1.7250	49.203	83.687
2018/05/16	13:58:17	1.7333	49.194	83.332

Company Name Hilcorp
Well Name San Juan 32-7 Unit #203
Type of Test POOH Static Gradient
Date(s) of Test 5/16/18



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/16	13:58:47	1.7417	49.167	82.980
2018/05/16	13:59:17	1.7500	49.201	82.629
2018/05/16	13:59:47	1.7583	49.181	82.285
2018/05/16	14:00:17	1.7667	49.099	81.894
2018/05/16	14:00:47	1.7750	48.755	80.586
POOH Gradient: 0.000 ft				
2018/05/16	14:01:17	1.7833	48.540	78.948
2018/05/16	14:01:47	1.7917	48.419	78.044
2018/05/16	14:02:17	1.8000	48.442	77.887
2018/05/16	14:02:47	1.8083	48.442	77.871
2018/05/16	14:03:17	1.8167	48.435	77.895
2018/05/16	14:03:47	1.8250	48.433	77.925
2018/05/16	14:04:17	1.8333	48.429	77.968
2018/05/16	14:04:47	1.8417	48.426	78.001
2018/05/16	14:05:17	1.8500	48.423	78.037
2018/05/16	14:05:47	1.8583	48.420	78.075
2018/05/16	14:06:17	1.8667	48.417	78.107
2018/05/16	14:06:47	1.8750	48.409	78.157
2018/05/16	14:07:17	1.8833	45.747	78.325
2018/05/16	14:07:47	1.8917	27.201	78.463
2018/05/16	14:08:17	1.9000	-3.092	78.447
2018/05/16	14:08:47	1.9083	-3.122	78.438
2018/05/16	14:09:17	1.9167	-3.109	78.165
2018/05/16	14:09:47	1.9250	-3.119	78.201