

SAN JUAN 31-6 UNIT 220
30-039-24987

MK

NMOCB

JUN 04 2018

DISTRICT III

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 Unit #220
Well Location	T31N, R6W, Sec 33
Field and Pool	Fruitland Coal
Status (Oil, Gas, Water, Injection)	Observation
Perforated Intervals	2148-3280
Mid-point of Perforated Intervals (MPP)	
Drilling Rig Number	
Elevations	
Kelly Bushing (KB)	
Casing Flange (CF)	
KB-CF	
Ground Level	
Plug Back Total Depth	
Total Depth	
Production Casing	5 1/2 to 3282
Production Tubing	2 3/8 to 3198

TEST INFORMATION

Type of Test	POOH Static Gradient
Date(s) of Test	5/30/18
Dead-weight Gauge Tubing Pressure	130
Dead-weight Gauge Casing Pressure	
Shut-in Date (Duration)	
Date / Time on Bottom	5/30/18 @1230
Date / Time off Bottom	5/30/18 @1330
Probe Serial Number	W1032
Probe Offset from End of Tool String	0-6000
Run Depth at Probe Pressure Port	3214

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure	138.9 psig
Maximum Recorded Probe Temperature	110.8 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 Unit #220
Type of Test POOH Static Gradient
Date(s) of Test 5/30/18



PROBE INFORMATION

Probe Serial Number W1032
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
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Type of Test	POOH Static Gradient
Date(s) of Test	5/30/18



COMMENTS

Reported By

Expert Downhole Services, Inc.

RIH with 1.50 IB and tagged fill @3248 WLM. RIH with BHP gauge to 3214 for 1 hour, then POOH making 5 minute stops per request.

Company Name Hilcorp
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Pressure vs. Depth

Probe Serial Number W1032

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
1230	1330	3214.000	138.771	-	92.750	-
1331	1336	3000.000	137.085	0.0079	109.274	-0.0772
1337	1342	2500.000	135.200	0.0038	105.710	0.0071
1344	1349	2000.000	133.285	0.0038	99.950	0.0115
1350	1355	1500.000	131.278	0.0040	91.580	0.0167
1356	1401	1000.000	129.488	0.0036	84.506	0.0141
1402	1407	500.000	127.877	0.0032	77.378	0.0143
1409	1414	0.000	125.481	0.0048	67.784	0.0192

Extrapolated to MPP:

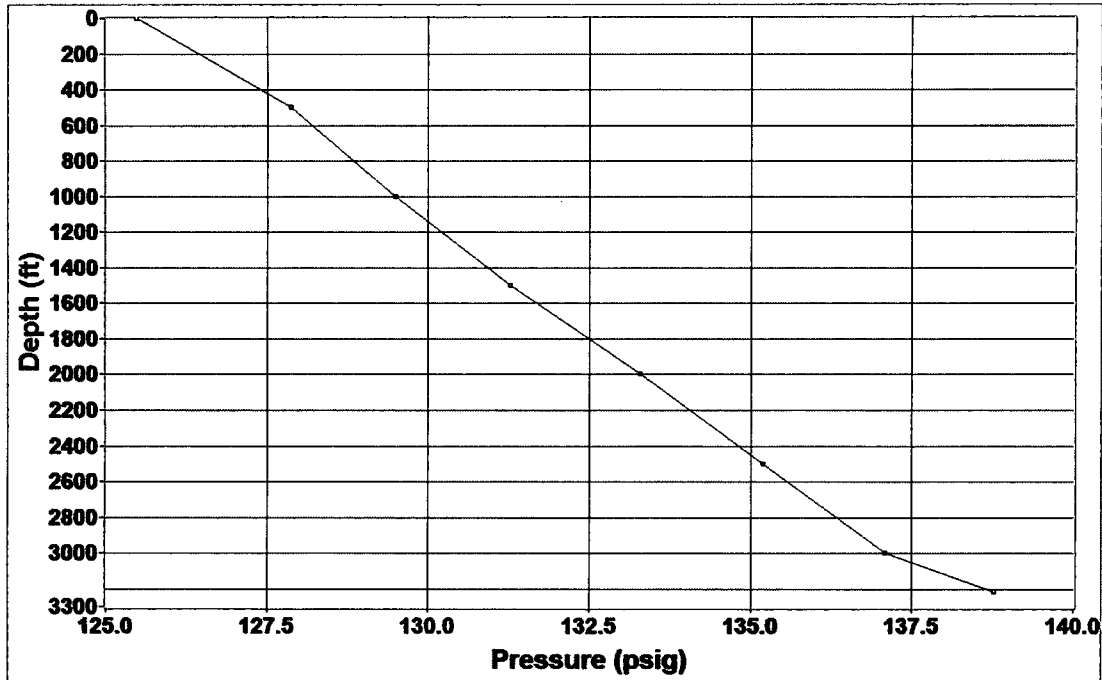
(ft)	(psig)	(deg F)
0.000		

Company Name Hilcorp
Well Name San Juan 31-6 Unit #220
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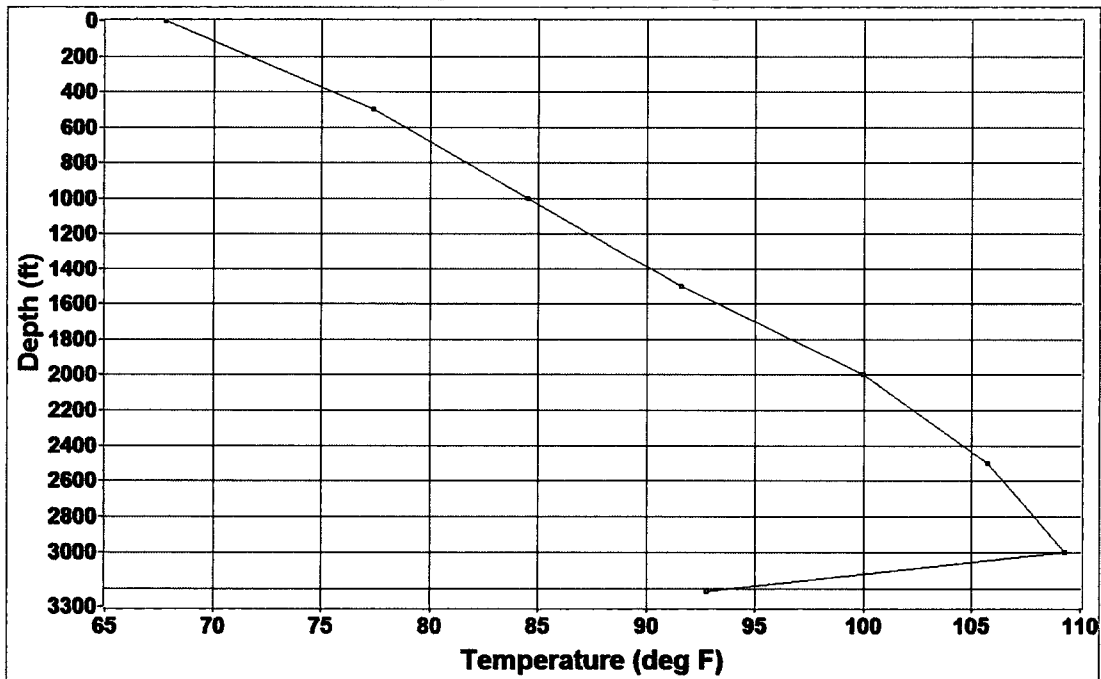


Probe Serial Number W1032

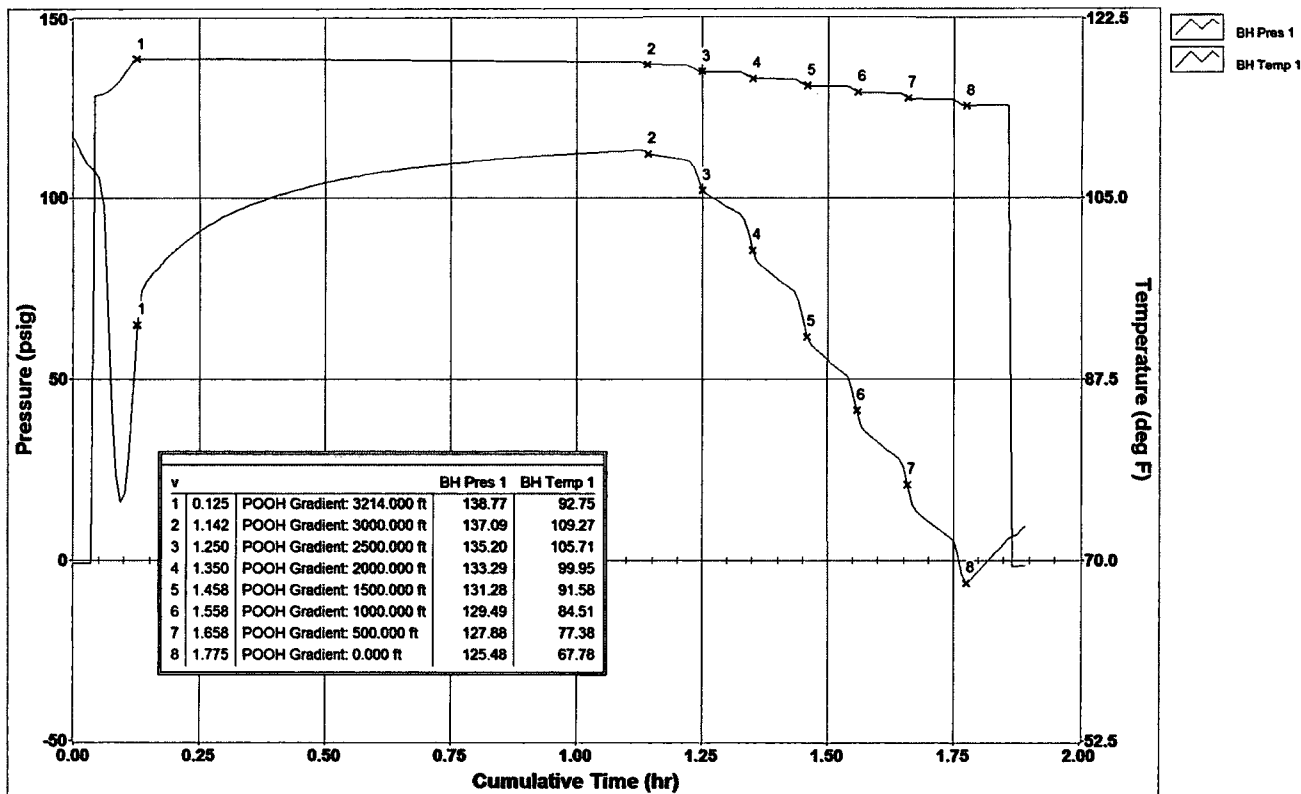
W1032 Depth vs. Pressure



W1032 Depth vs. Temperature



San Juan 31-6 Unit #220



Company Name Hilcorp
Well Name San Juan 31-6 Unit #220
Type of Test POOH Static Gradient
Date(s) of Test 5/30/18



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/30	12:22:51	0.0000	-0.718	110.750
2018/05/30	12:23:21	0.0083	-0.767	110.030
2018/05/30	12:23:51	0.0167	-0.783	109.094
2018/05/30	12:24:21	0.0250	-0.824	108.356
2018/05/30	12:24:51	0.0333	-0.859	107.924
2018/05/30	12:25:21	0.0417	128.360	107.564
2018/05/30	12:25:51	0.0500	128.650	106.970
2018/05/30	12:26:21	0.0583	129.005	104.378
2018/05/30	12:26:51	0.0667	129.538	94.352
2018/05/30	12:27:21	0.0750	130.406	84.794
2018/05/30	12:27:51	0.0833	131.485	78.332
2018/05/30	12:28:21	0.0917	132.927	75.578
2018/05/30	12:28:51	0.1000	134.438	76.352
2018/05/30	12:29:21	0.1083	136.053	80.024
2018/05/30	12:29:51	0.1167	137.716	85.802
POOH Gradient: 3214.000 ft				
2018/05/30	12:30:21	0.1250	138.771	92.750
2018/05/30	12:30:51	0.1333	138.874	95.972
2018/05/30	12:31:21	0.1417	138.887	96.818
2018/05/30	12:31:51	0.1500	138.823	97.322
2018/05/30	12:32:21	0.1583	138.832	97.808
2018/05/30	12:32:51	0.1667	138.842	98.258
2018/05/30	12:33:21	0.1750	138.830	98.708
2018/05/30	12:33:51	0.1833	138.842	99.122
2018/05/30	12:34:21	0.1917	138.837	99.518
2018/05/30	12:34:51	0.2000	138.829	99.896
2018/05/30	12:35:21	0.2083	138.814	100.256
2018/05/30	12:35:51	0.2167	138.823	100.598
2018/05/30	12:36:21	0.2250	138.814	100.922
2018/05/30	12:36:51	0.2333	138.840	101.228
2018/05/30	12:37:21	0.2417	138.843	101.534
2018/05/30	12:37:51	0.2500	138.826	101.804
2018/05/30	12:38:21	0.2583	138.824	102.074
2018/05/30	12:38:51	0.2667	138.810	102.326
2018/05/30	12:39:21	0.2750	138.795	102.560
2018/05/30	12:39:51	0.2833	138.766	102.794
2018/05/30	12:40:21	0.2917	138.794	103.028
2018/05/30	12:40:51	0.3000	138.787	103.226
2018/05/30	12:41:21	0.3083	138.766	103.424
2018/05/30	12:41:51	0.3167	138.769	103.622
2018/05/30	12:42:21	0.3250	138.765	103.820
2018/05/30	12:42:51	0.3333	138.762	103.982
2018/05/30	12:43:21	0.3417	138.720	104.162
2018/05/30	12:43:51	0.3500	138.692	104.342
2018/05/30	12:44:21	0.3583	138.733	104.486
2018/05/30	12:44:51	0.3667	138.708	104.630
2018/05/30	12:45:21	0.3750	138.717	104.774
2018/05/30	12:45:51	0.3833	138.701	104.918
2018/05/30	12:46:21	0.3917	138.691	105.062
2018/05/30	12:46:51	0.4000	138.681	105.188
2018/05/30	12:47:21	0.4083	138.663	105.314
2018/05/30	12:47:51	0.4167	138.626	105.440
2018/05/30	12:48:21	0.4250	138.663	105.566
2018/05/30	12:48:51	0.4333	138.637	105.674

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/30	12:49:21	0.4417	138.636	105.782
2018/05/30	12:49:51	0.4500	138.618	105.890
2018/05/30	12:50:21	0.4583	138.610	105.998
2018/05/30	12:50:51	0.4667	138.575	106.106
2018/05/30	12:51:21	0.4750	138.597	106.214
2018/05/30	12:51:51	0.4833	138.573	106.304
2018/05/30	12:52:21	0.4917	138.570	106.394
2018/05/30	12:52:51	0.5000	138.559	106.502
2018/05/30	12:53:21	0.5083	138.556	106.592
2018/05/30	12:53:51	0.5167	138.523	106.664
2018/05/30	12:54:21	0.5250	138.524	106.754
2018/05/30	12:54:51	0.5333	138.468	106.844
2018/05/30	12:55:21	0.5417	138.508	106.898
2018/05/30	12:55:51	0.5500	138.507	106.988
2018/05/30	12:56:21	0.5583	138.470	107.078
2018/05/30	12:56:51	0.5667	138.505	107.132
2018/05/30	12:57:21	0.5750	138.481	107.204
2018/05/30	12:57:51	0.5833	138.469	107.276
2018/05/30	12:58:21	0.5917	138.457	107.348
2018/05/30	12:58:51	0.6000	138.437	107.402
2018/05/30	12:59:21	0.6083	138.431	107.474
2018/05/30	12:59:51	0.6167	138.425	107.528
2018/05/30	13:00:21	0.6250	138.414	107.582
2018/05/30	13:00:51	0.6333	138.405	107.654
2018/05/30	13:01:21	0.6417	138.395	107.708
2018/05/30	13:01:51	0.6500	138.395	107.762
2018/05/30	13:02:21	0.6583	138.366	107.816
2018/05/30	13:02:51	0.6667	138.379	107.870
2018/05/30	13:03:21	0.6750	138.322	107.924
2018/05/30	13:03:51	0.6833	138.350	107.978
2018/05/30	13:04:21	0.6917	138.325	108.014
2018/05/30	13:04:51	0.7000	138.336	108.068
2018/05/30	13:05:21	0.7083	138.324	108.122
2018/05/30	13:05:51	0.7167	138.315	108.176
2018/05/30	13:06:21	0.7250	138.298	108.212
2018/05/30	13:06:51	0.7333	138.285	108.266
2018/05/30	13:07:21	0.7417	138.276	108.302
2018/05/30	13:07:51	0.7500	138.278	108.356
2018/05/30	13:08:21	0.7583	138.253	108.392
2018/05/30	13:08:51	0.7667	138.231	108.428
2018/05/30	13:09:21	0.7750	138.234	108.464
2018/05/30	13:09:51	0.7833	138.224	108.500
2018/05/30	13:10:21	0.7917	138.209	108.554
2018/05/30	13:10:51	0.8000	138.209	108.590
2018/05/30	13:11:21	0.8083	138.198	108.626
2018/05/30	13:11:51	0.8167	138.189	108.662
2018/05/30	13:12:21	0.8250	138.177	108.698
2018/05/30	13:12:51	0.8333	138.173	108.734
2018/05/30	13:13:21	0.8417	138.159	108.770
2018/05/30	13:13:51	0.8500	138.127	108.806
2018/05/30	13:14:21	0.8583	138.131	108.842
2018/05/30	13:14:51	0.8667	138.119	108.860
2018/05/30	13:15:21	0.8750	138.092	108.878
2018/05/30	13:15:51	0.8833	138.050	108.932

Company Name Hilcorp
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Type of Test POOH Static Gradient
Date(s) of Test 5/30/18



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/30	13:16:21	0.8917	138.093	108.968
2018/05/30	13:16:51	0.9000	138.079	108.986
2018/05/30	13:17:21	0.9083	138.067	109.022
2018/05/30	13:17:51	0.9167	138.048	109.040
2018/05/30	13:18:21	0.9250	138.047	109.076
2018/05/30	13:18:51	0.9333	138.016	109.112
2018/05/30	13:19:21	0.9417	138.034	109.130
2018/05/30	13:19:51	0.9500	138.024	109.148
2018/05/30	13:20:21	0.9583	138.018	109.184
2018/05/30	13:20:51	0.9667	137.989	109.202
2018/05/30	13:21:21	0.9750	137.990	109.220
2018/05/30	13:21:51	0.9833	137.950	109.256
2018/05/30	13:22:21	0.9917	137.961	109.274
2018/05/30	13:22:51	1.0000	137.934	109.310
2018/05/30	13:23:21	1.0083	137.942	109.328
2018/05/30	13:23:51	1.0167	137.938	109.346
2018/05/30	13:24:21	1.0250	137.934	109.382
2018/05/30	13:24:51	1.0333	137.892	109.400
2018/05/30	13:25:21	1.0417	137.871	109.418
2018/05/30	13:25:51	1.0500	137.903	109.436
2018/05/30	13:26:21	1.0583	137.889	109.454
2018/05/30	13:26:51	1.0667	137.824	109.490
2018/05/30	13:27:21	1.0750	137.877	109.508
2018/05/30	13:27:51	1.0833	137.861	109.526
2018/05/30	13:28:21	1.0917	137.842	109.544
2018/05/30	13:28:51	1.1000	137.842	109.580
2018/05/30	13:29:21	1.1083	137.834	109.580
2018/05/30	13:29:51	1.1167	137.821	109.616
2018/05/30	13:30:21	1.1250	137.800	109.616
2018/05/30	13:30:51	1.1333	137.268	109.562
POOH Gradient: 3000.000 ft				
2018/05/30	13:31:21	1.1417	137.085	109.274
2018/05/30	13:31:51	1.1500	137.071	109.166
2018/05/30	13:32:21	1.1583	137.064	109.112
2018/05/30	13:32:51	1.1667	137.046	109.040
2018/05/30	13:33:21	1.1750	137.024	108.986
2018/05/30	13:33:51	1.1833	137.014	108.914
2018/05/30	13:34:21	1.1917	136.984	108.860
2018/05/30	13:34:51	1.2000	136.995	108.806
2018/05/30	13:35:21	1.2083	136.981	108.752
2018/05/30	13:35:51	1.2167	136.966	108.680
2018/05/30	13:36:21	1.2250	136.615	108.554
2018/05/30	13:36:51	1.2333	136.022	107.870
2018/05/30	13:37:21	1.2417	135.365	106.772
POOH Gradient: 2500.000 ft				
2018/05/30	13:37:51	1.2500	135.200	105.710
2018/05/30	13:38:21	1.2583	135.172	105.368
2018/05/30	13:38:51	1.2667	135.159	105.116
2018/05/30	13:39:21	1.2750	135.136	104.864
2018/05/30	13:39:51	1.2833	135.108	104.612
2018/05/30	13:40:21	1.2917	135.084	104.378
2018/05/30	13:40:51	1.3000	135.069	104.126
2018/05/30	13:41:21	1.3083	135.052	103.892
2018/05/30	13:41:51	1.3167	135.019	103.658

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/30	13:42:21	1.3250	135.008	103.442
2018/05/30	13:42:51	1.3333	134.554	102.956
2018/05/30	13:43:21	1.3417	133.900	101.624
POOH Gradient: 2000.000 ft				
2018/05/30	13:43:51	1.3500	133.285	99.950
2018/05/30	13:44:21	1.3583	133.240	98.870
2018/05/30	13:44:51	1.3667	133.213	98.492
2018/05/30	13:45:21	1.3750	133.185	98.150
2018/05/30	13:45:51	1.3833	133.150	97.826
2018/05/30	13:46:21	1.3917	133.142	97.502
2018/05/30	13:46:51	1.4000	133.120	97.178
2018/05/30	13:47:21	1.4083	133.087	96.872
2018/05/30	13:47:51	1.4167	133.075	96.584
2018/05/30	13:48:21	1.4250	133.058	96.278
2018/05/30	13:48:51	1.4333	133.042	95.990
2018/05/30	13:49:21	1.4417	132.408	95.108
2018/05/30	13:49:51	1.4500	131.716	93.416
POOH Gradient: 1500.000 ft				
2018/05/30	13:50:21	1.4583	131.278	91.580
2018/05/30	13:50:51	1.4667	131.250	90.842
2018/05/30	13:51:21	1.4750	131.227	90.464
2018/05/30	13:51:51	1.4833	131.184	90.104
2018/05/30	13:52:21	1.4917	131.181	89.744
2018/05/30	13:52:51	1.5000	131.165	89.402
2018/05/30	13:53:21	1.5083	131.140	89.060
2018/05/30	13:53:51	1.5167	131.120	88.718
2018/05/30	13:54:21	1.5250	131.103	88.394
2018/05/30	13:54:51	1.5333	131.087	88.070
2018/05/30	13:55:21	1.5417	130.895	87.746
2018/05/30	13:55:51	1.5500	130.197	86.360
POOH Gradient: 1000.000 ft				
2018/05/30	13:56:21	1.5583	129.488	84.506
2018/05/30	13:56:51	1.5667	129.304	83.012
2018/05/30	13:57:21	1.5750	129.285	82.526
2018/05/30	13:57:51	1.5833	129.271	82.184
2018/05/30	13:58:21	1.5917	129.255	81.824
2018/05/30	13:58:51	1.6000	129.253	81.482
2018/05/30	13:59:21	1.6083	129.232	81.140
2018/05/30	13:59:51	1.6167	129.207	80.780
2018/05/30	14:00:21	1.6250	129.185	80.456
2018/05/30	14:00:51	1.6333	129.169	80.132
2018/05/30	14:01:21	1.6417	129.130	79.826
2018/05/30	14:01:51	1.6500	128.634	79.106
POOH Gradient: 500.000 ft				
2018/05/30	14:02:21	1.6583	127.877	77.378
2018/05/30	14:02:51	1.6667	127.406	75.488
2018/05/30	14:03:21	1.6750	127.394	74.786
2018/05/30	14:03:51	1.6833	127.379	74.444
2018/05/30	14:04:21	1.6917	127.326	74.120
2018/05/30	14:04:51	1.7000	127.345	73.796
2018/05/30	14:05:21	1.7083	127.330	73.472
2018/05/30	14:05:51	1.7167	127.310	73.166
2018/05/30	14:06:21	1.7250	127.292	72.824
2018/05/30	14:06:51	1.7333	127.272	72.536

Company Name Hilcorp
Well Name San Juan 31-6 Unit #220
Type of Test POOH Static Gradient
Date(s) of Test 5/30/18



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2018/05/30	14:07:21	1.7417	127.260	72.230
2018/05/30	14:07:51	1.7500	127.066	71.888
2018/05/30	14:08:21	1.7583	126.335	70.484
2018/05/30	14:08:51	1.7667	125.639	68.630
POOH Gradient: 0.000 ft				
2018/05/30	14:09:21	1.7750	125.481	67.784
2018/05/30	14:09:51	1.7833	125.487	68.090
2018/05/30	14:10:21	1.7917	125.487	68.540
2018/05/30	14:10:51	1.8000	125.490	68.972
2018/05/30	14:11:21	1.8083	125.491	69.440
2018/05/30	14:11:51	1.8167	125.521	69.872
2018/05/30	14:12:21	1.8250	125.548	70.322
2018/05/30	14:12:51	1.8333	125.506	70.736
2018/05/30	14:13:21	1.8417	125.506	71.186
2018/05/30	14:13:51	1.8500	125.503	71.600
2018/05/30	14:14:21	1.8583	125.474	72.086
2018/05/30	14:14:51	1.8667	-1.648	72.302
2018/05/30	14:15:21	1.8750	-1.675	72.482
2018/05/30	14:15:51	1.8833	-1.613	72.896