

Pressure Test Report

COMPANY INFORMATION

Company Name
Representative
Phone
Fax
Address

HILCORP
PRISCILLA SHORTY

NMOC
JUN 05 2019
DISTRICT III

E-Mail Address
Service Company

EXPERT DOWNHOLE SERVICES, INC

WELL INFORMATION

Well Name
Well Location
Field and Pool
Status (Oil, Gas, Water, Injection)
Perforated Intervals
Mid-point of Perforated Intervals (MPP)
Drilling Rig Number
Elevations

SAN JUAN 31-6 UNIT #229 POW
T31N, R6W, SEC 28
FRUITLAND COAL
OBSERVATION
3218-3360

Kelly Bushing (KB)
Casing Flange (CF)
KB-CF

13

Ground Level
Plug Back Total Depth
Total Depth
Production Casing
Production Tubing

6501
3365
3365
5 1/2 TO 4670
2 3/8 TO 3315

TEST INFORMATION

Type of Test
Date(s) of Test
Dead-weight Gauge Tubing Pressure
Dead-weight Gauge Casing Pressure
Shut-in Date (Duration)
Date / Time on Bottom
Date / Time off Bottom

POOH STATIC GRADIENT
5/30/19
150
5/30/19 @1132
5/30/19 @1232

Probe Serial Number
Probe Offset from End of Tool String
Run Depth at Probe Pressure Port

W1162
0-6000
3312

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure
Maximum Recorded Probe Temperature
Final Buildup Pressure
Gradient Survey Information
Extrapolated Pressure to MPP
Final Gradient at Depth
Job Number

164.6 psig
111.2 deg F

Company Name HILCORP
Well Name SAN JUAN 31-6 UNIT #229 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 5/30/19



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 31-6 UNIT #229 POW
Type of Test	POOH STATIC GRADIENT
Date(s) of Test	5/30/19



COMMENTS

Reported By

EXPERT DOWNHOLE SERVICES, INC

RIH WITH 1.50 IMPRESSION BLOCK AND TAGGED FILL @3315 WLM. RIH WITH BHP GAUGE TO 3312 WLM FOR 1 HOUR, THEN POOH MAKING 5 MINUTE STOPS PER REQUEST.

Company Name HILCORP
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Pressure vs. Depth

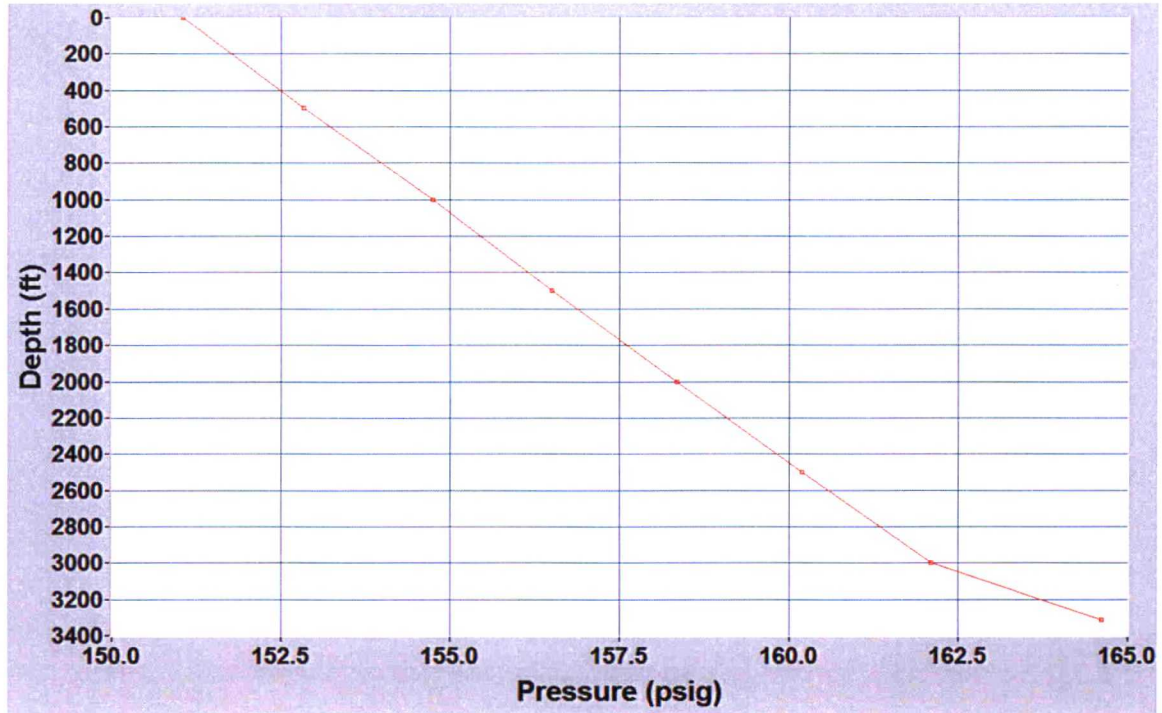
Probe Serial Number W1162

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
1132	1232	3312.000	164.615	-	96.944	-
1233	1238	3000.000	162.100	0.0081	110.354	-0.0430
1240	1245	2500.000	160.201	0.0038	105.152	0.0104
1246	1251	2000.000	158.354	0.0037	98.240	0.0138
1252	1257	1500.000	156.509	0.0037	90.788	0.0149
1258	1303	1000.000	154.751	0.0035	81.716	0.0181
1304	1309	500.000	152.839	0.0038	74.102	0.0152
1311	1316	0.000	151.066	0.0035	66.452	0.0153

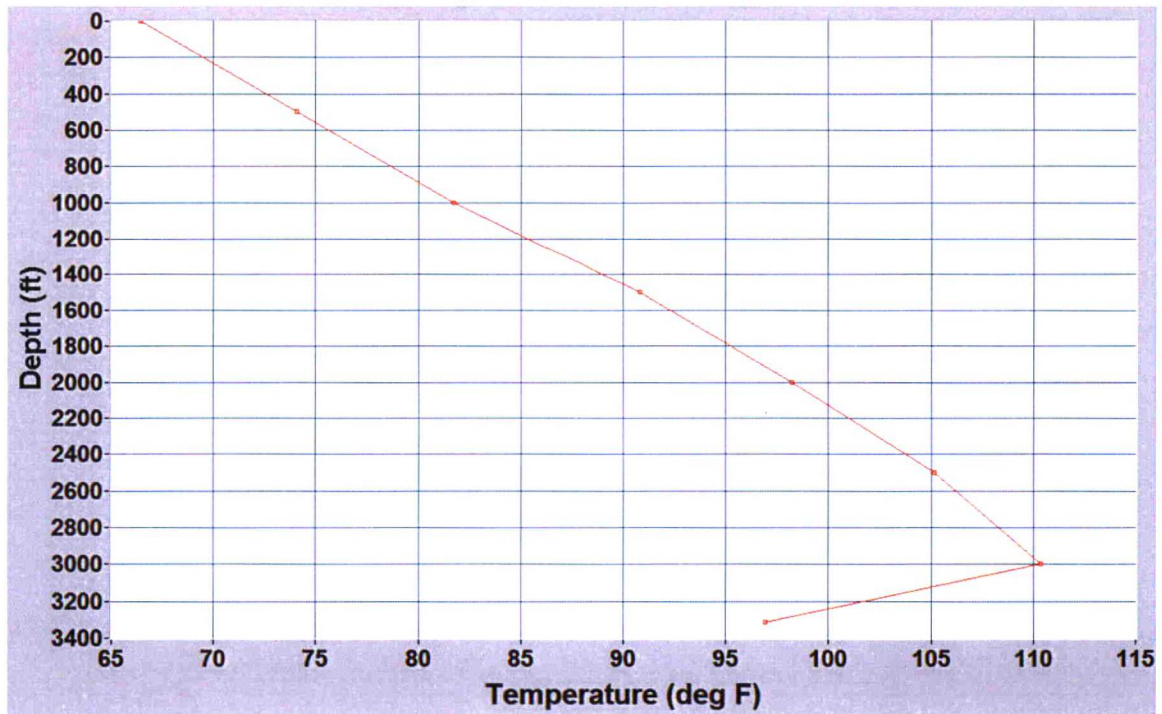
Extrapolated to MPP:

(ft)	(psig)	(deg F)
0.000		

W1162 Depth vs. Pressure



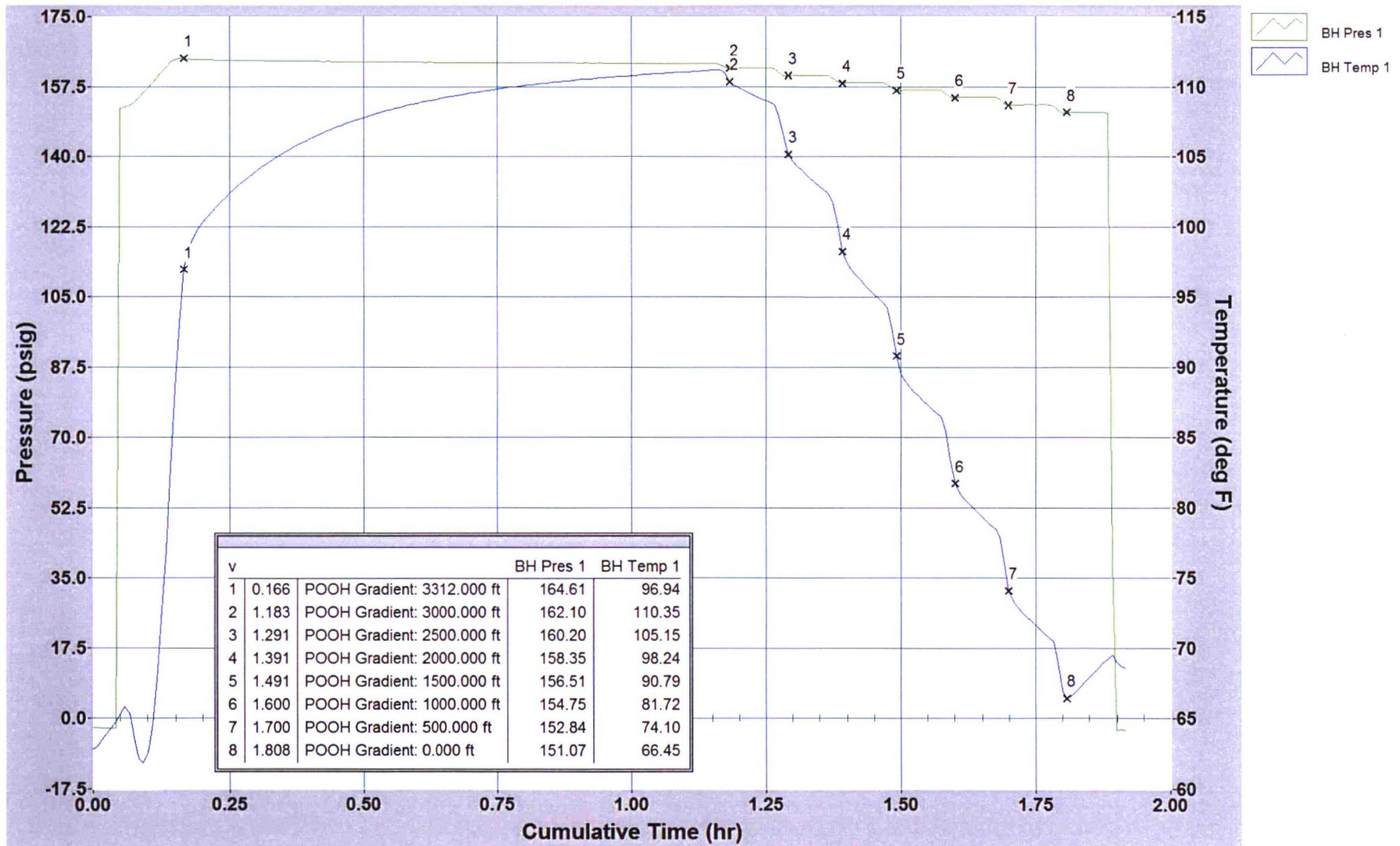
W1162 Depth vs. Temperature



Company Name HILCORP
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SAN JUAN 31-6 UNIT #229 POW



Company Name HILCORP
Well Name SAN JUAN 31-6 UNIT #229 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 5/30/19



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/30	11:22:49	0.0000	-2.255	62.798
2019/05/30	11:23:18	0.0081	-2.316	63.014
2019/05/30	11:24:18	0.0247	-2.431	63.896
2019/05/30	11:25:18	0.0414	-2.418	64.760
2019/05/30	11:26:18	0.0581	152.345	65.840
2019/05/30	11:26:48	0.0664	152.751	65.336
2019/05/30	11:27:48	0.0831	154.597	62.168
2019/05/30	11:28:48	0.0997	156.971	62.600
2019/05/30	11:29:48	0.1164	159.620	67.784
2019/05/30	11:30:18	0.1247	161.014	72.014
2019/05/30	11:31:18	0.1414	163.614	82.886
2019/05/30	11:32:18	0.1581	164.619	93.128
POOH Gradient: 3312.000 ft				
2019/05/30	11:32:48	0.1664	164.615	96.944
2019/05/30	11:33:18	0.1747	164.408	98.438
2019/05/30	11:34:18	0.1914	164.226	99.752
2019/05/30	11:35:18	0.2081	164.162	100.652
2019/05/30	11:36:18	0.2247	164.141	101.390
2019/05/30	11:37:18	0.2414	164.083	102.056
2019/05/30	11:37:48	0.2497	164.052	102.380
2019/05/30	11:38:48	0.2664	164.065	102.956
2019/05/30	11:39:48	0.2831	163.994	103.478
2019/05/30	11:40:48	0.2997	163.985	103.982
2019/05/30	11:41:18	0.3081	163.971	104.216
2019/05/30	11:42:18	0.3247	163.939	104.648
2019/05/30	11:43:18	0.3414	163.861	105.062
2019/05/30	11:44:18	0.3581	163.848	105.440
2019/05/30	11:44:48	0.3664	163.885	105.620
2019/05/30	11:45:48	0.3831	163.836	105.962
2019/05/30	11:46:48	0.3997	163.823	106.268
2019/05/30	11:47:48	0.4164	163.797	106.556
2019/05/30	11:48:48	0.4331	163.803	106.844
2019/05/30	11:49:48	0.4497	163.730	107.096
2019/05/30	11:50:48	0.4664	163.753	107.348
2019/05/30	11:51:48	0.4831	163.724	107.564
2019/05/30	11:52:18	0.4914	163.717	107.672
2019/05/30	11:53:18	0.5081	163.726	107.888
2019/05/30	11:54:18	0.5247	163.737	108.068
2019/05/30	11:55:18	0.5414	163.684	108.266
2019/05/30	11:55:48	0.5497	163.646	108.356
2019/05/30	11:56:48	0.5664	163.671	108.500
2019/05/30	11:57:48	0.5831	163.646	108.680
2019/05/30	11:58:48	0.5997	163.623	108.806
2019/05/30	11:59:18	0.6081	163.630	108.878
2019/05/30	12:00:18	0.6247	163.623	109.004
2019/05/30	12:01:18	0.6414	163.607	109.148
2019/05/30	12:02:18	0.6581	163.601	109.256
2019/05/30	12:03:18	0.6747	163.550	109.364
2019/05/30	12:04:18	0.6914	163.547	109.472
2019/05/30	12:05:18	0.7081	163.547	109.580
2019/05/30	12:06:18	0.7247	163.542	109.670
2019/05/30	12:06:48	0.7331	163.529	109.724
2019/05/30	12:07:48	0.7497	163.489	109.832
2019/05/30	12:08:48	0.7664	163.495	109.904

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/30	12:09:48	0.7831	163.494	109.994
2019/05/30	12:10:18	0.7914	163.516	110.048
2019/05/30	12:11:18	0.8081	163.478	110.120
2019/05/30	12:12:18	0.8247	163.450	110.174
2019/05/30	12:13:18	0.8414	163.456	110.246
2019/05/30	12:13:48	0.8497	163.449	110.282
2019/05/30	12:14:48	0.8664	163.437	110.354
2019/05/30	12:15:48	0.8831	163.447	110.408
2019/05/30	12:16:48	0.8997	163.400	110.480
2019/05/30	12:17:48	0.9164	163.444	110.516
2019/05/30	12:18:48	0.9331	163.411	110.606
2019/05/30	12:19:48	0.9497	163.366	110.642
2019/05/30	12:20:48	0.9664	163.400	110.696
2019/05/30	12:21:18	0.9747	163.388	110.732
2019/05/30	12:22:18	0.9914	163.375	110.768
2019/05/30	12:23:18	1.0081	163.376	110.822
2019/05/30	12:24:18	1.0247	163.324	110.876
2019/05/30	12:24:48	1.0331	163.341	110.894
2019/05/30	12:25:48	1.0497	163.376	110.948
2019/05/30	12:26:48	1.0664	163.292	110.984
2019/05/30	12:27:48	1.0831	163.323	111.038
2019/05/30	12:28:18	1.0914	163.318	111.056
2019/05/30	12:29:18	1.1081	163.318	111.074
2019/05/30	12:30:18	1.1247	163.312	111.128
2019/05/30	12:31:18	1.1414	163.286	111.164
2019/05/30	12:32:18	1.1581	163.289	111.218
2019/05/30	12:33:18	1.1747	162.322	110.966
POOH Gradient: 3000.000 ft				
2019/05/30	12:33:48	1.1831	162.100	110.354
2019/05/30	12:34:18	1.1914	162.113	110.084
2019/05/30	12:35:18	1.2081	162.110	109.742
2019/05/30	12:35:48	1.2164	162.090	109.562
2019/05/30	12:36:48	1.2331	162.117	109.274
2019/05/30	12:37:48	1.2497	162.136	108.986
2019/05/30	12:38:48	1.2664	161.826	108.680
2019/05/30	12:39:18	1.2747	161.002	107.816
POOH Gradient: 2500.000 ft				
2019/05/30	12:40:18	1.2914	160.201	105.152
2019/05/30	12:41:18	1.3081	160.283	104.342
2019/05/30	12:42:18	1.3247	160.268	103.712
2019/05/30	12:42:48	1.3331	160.286	103.424
2019/05/30	12:43:48	1.3497	160.271	102.866
2019/05/30	12:44:48	1.3664	160.290	102.344
2019/05/30	12:45:48	1.3831	158.754	100.094
POOH Gradient: 2000.000 ft				
2019/05/30	12:46:18	1.3914	158.354	98.240
2019/05/30	12:46:48	1.3997	158.433	97.448
2019/05/30	12:47:48	1.4164	158.471	96.584
2019/05/30	12:48:48	1.4331	158.481	95.846
2019/05/30	12:49:48	1.4497	158.512	95.198
2019/05/30	12:50:18	1.4581	158.509	94.892
2019/05/30	12:51:18	1.4747	158.206	94.226
POOH Gradient: 1500.000 ft				
2019/05/30	12:52:18	1.4914	156.509	90.788

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		hr	psig	deg F
2019/05/30	12:53:18	1.5081	156.660	88.988
2019/05/30	12:53:48	1.5164	156.705	88.610
2019/05/30	12:54:48	1.5331	156.693	87.926
2019/05/30	12:55:48	1.5497	156.715	87.296
2019/05/30	12:56:48	1.5664	156.713	86.702
2019/05/30	12:57:18	1.5747	156.700	86.432
2019/05/30	12:58:18	1.5914	154.851	83.498
POOH Gradient: 1000.000 ft				
2019/05/30	12:58:48	1.5997	154.751	81.716
2019/05/30	12:59:18	1.6081	154.828	81.068
2019/05/30	13:00:18	1.6247	154.889	80.330
2019/05/30	13:01:18	1.6414	154.903	79.664
2019/05/30	13:02:18	1.6581	154.883	79.052
2019/05/30	13:03:18	1.6747	154.892	78.494
2019/05/30	13:04:18	1.6914	153.292	76.118
POOH Gradient: 500.000 ft				
2019/05/30	13:04:48	1.6997	152.839	74.102
2019/05/30	13:05:48	1.7164	153.006	72.914
2019/05/30	13:06:48	1.7331	153.031	72.248
2019/05/30	13:07:48	1.7497	153.002	71.618
2019/05/30	13:08:18	1.7581	153.048	71.330
2019/05/30	13:09:18	1.7747	153.002	70.754
2019/05/30	13:10:18	1.7914	151.691	68.954
POOH Gradient: 0.000 ft				
2019/05/30	13:11:18	1.8081	151.066	66.452
2019/05/30	13:11:48	1.8164	151.108	66.650
2019/05/30	13:12:48	1.8331	151.110	67.298
2019/05/30	13:13:48	1.8497	151.096	67.982
2019/05/30	13:14:48	1.8664	151.080	68.630
2019/05/30	13:15:48	1.8831	151.042	69.242
2019/05/30	13:16:48	1.8997	-2.909	69.026