

Pressure Test Report

COMPANY INFORMATION

Company Name	HILCORP
Representative	PRISCILLA SHORTY
Phone	
Fax	
Address	

NMOCD
MAY 22 2019
DISTRICT III

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

WELL INFORMATION

Well Name	SAN JUAN UNIT #402 POW
Well Location	T30N, R6W, SEC 15
Field and Pool	FRUITLAND COAL
Status (Oil, Gas, Water, Injection)	OBSERVATION
Perforated Intervals	
Mid-point of Perforated Intervals (MPP)	
Drilling Rig Number	
Elevations	
Kelly Bushing (KB)	12
Casing Flange (CF)	
KB-CF	
Ground Level	6250
Plug Back Total Depth	3155
Total Depth	3160
Production Casing	5 1/2 TO 3156
Production Tubing	2 3/8 TO 3041

TEST INFORMATION

Type of Test	POOH STATIC GRADIENT
Date(s) of Test	05/20/19
Dead-weight Gauge Tubing Pressure	25
Dead-weight Gauge Casing Pressure	
Shut-in Date (Duration)	
Date / Time on Bottom	5/20/19 @1219
Date / Time off Bottom	5/20/19 @1319
Probe Serial Number	W1032
Probe Offset from End of Tool String	0-6000
Run Depth at Probe Pressure Port	3130

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure	64.3 psig
Maximum Recorded Probe Temperature	108.0 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 UNIT #402 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 05/20/19



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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COMMENTS

Reported By

EXPERT DOWNHOLE SERVICES, INC

RIH WITH 1.50 IMPRESSION BLOCK AND TAGGED FILL @3135 WLM. RIH WITH BHP GAUGE TO 3130 FOR 1 HOUR, THEN POOH MAKING 5 MINUTE STOPS PER REQUEST.

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Pressure vs. Depth

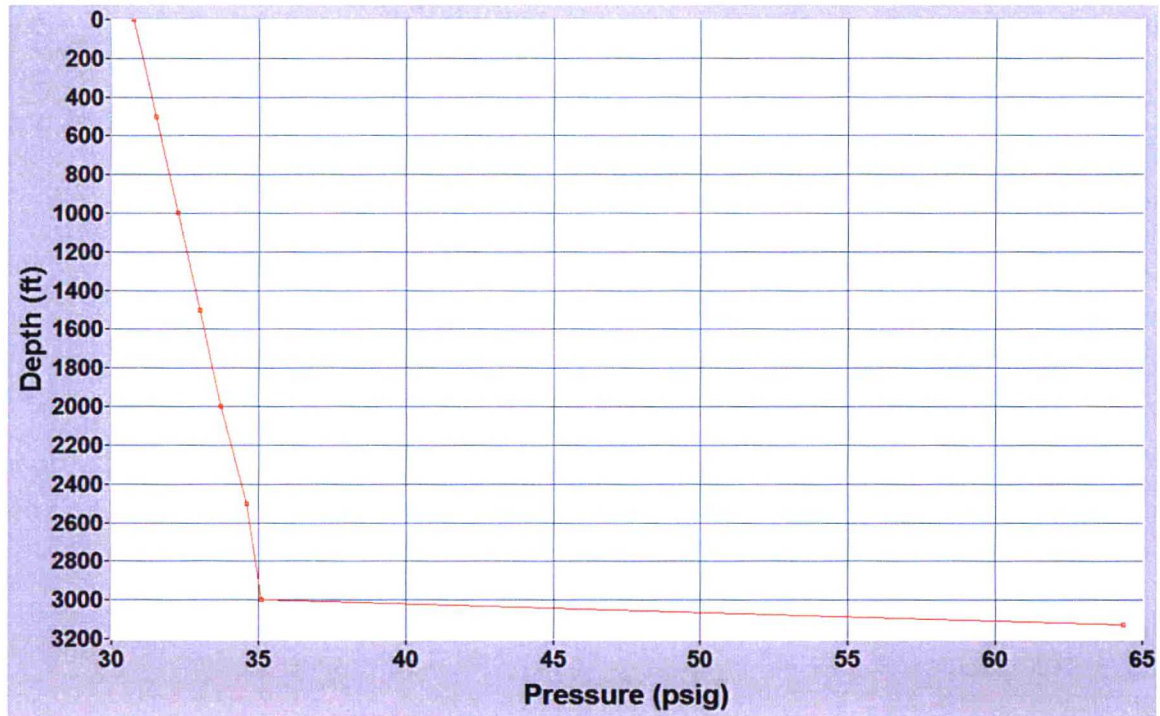
Probe Serial Number W1032

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
1219	1319	3130.000	64.346	-	94.496	-
1320	1325	3000.000	35.088	0.2251	105.980	-0.0883
1327	1332	2500.000	34.607	0.0010	104.630	0.0027
1335	1340	2000.000	33.737	0.0017	99.158	0.0109
1343	1348	1500.000	33.003	0.0015	93.830	0.0107
1350	1355	1000.000	32.256	0.0015	87.890	0.0119
1358	1403	500.000	31.498	0.0015	80.168	0.0154
1406	1411	0.000	30.764	0.0015	71.582	0.0172

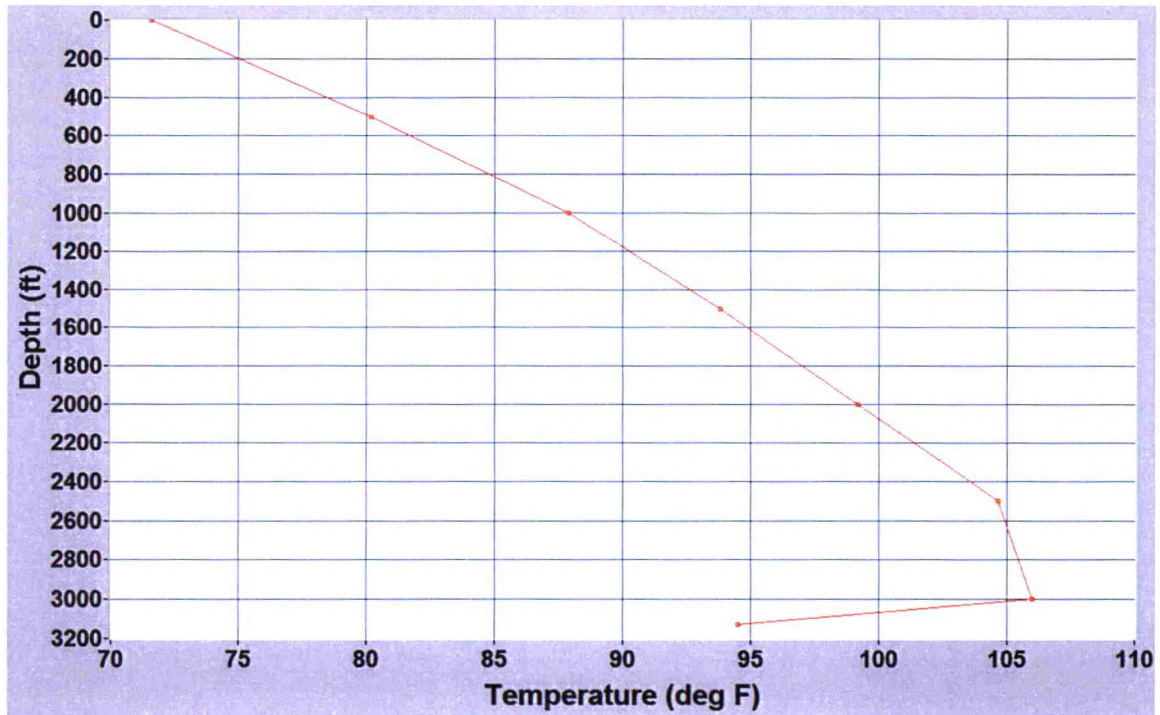
Extrapolated to MPP:

(ft)	(psig)	(deg F)
0.000		

Depth vs. Pressure



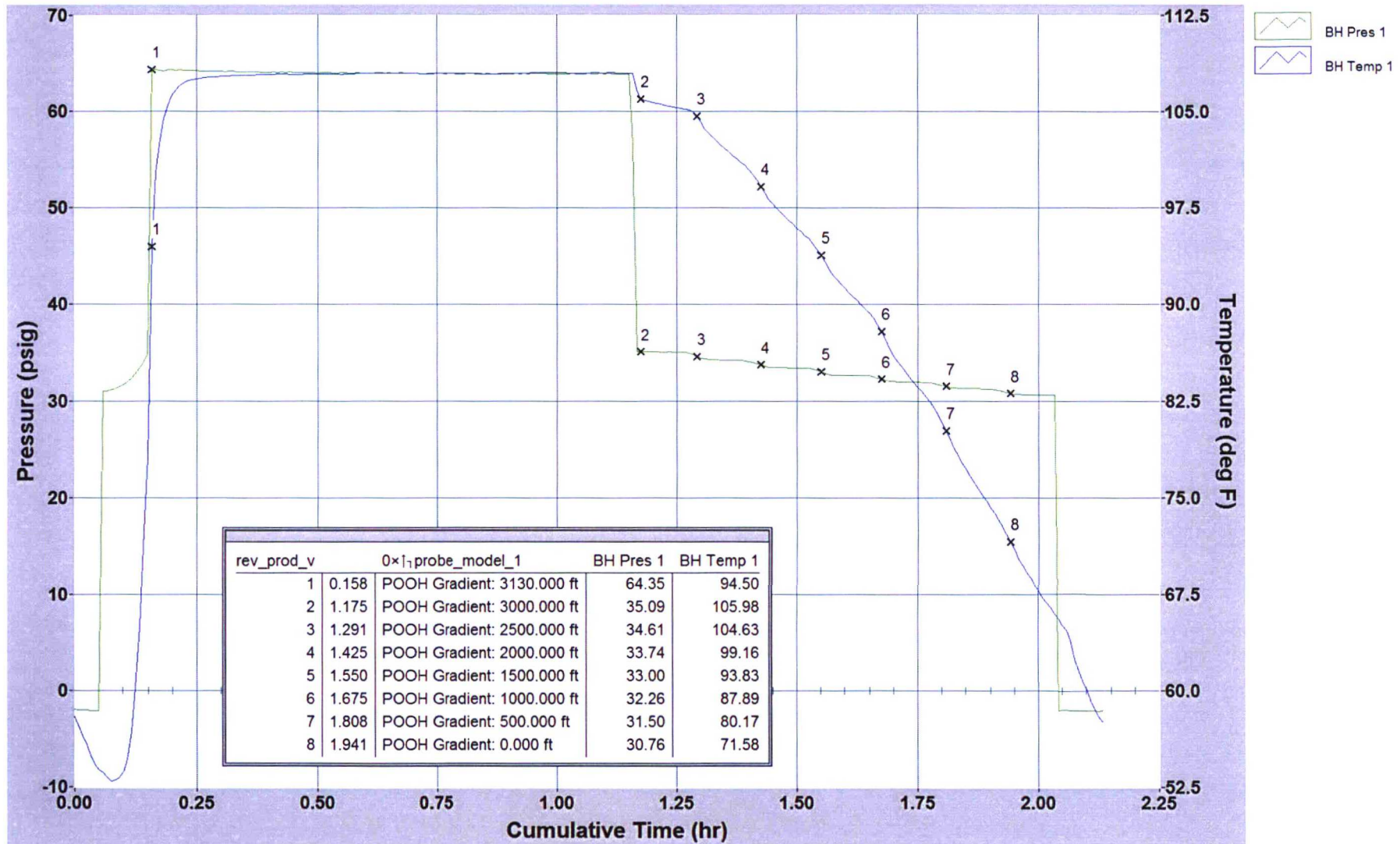
Depth vs. Temperature



Company Name HILCORP
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SAN JUAN 30-6 UNIT #402 POW



Company Name HILCORP
Well Name SAN JUAN UNIT #402 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 05/20/19



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/20	12:10:06	0.0000	-1.970	57.956
2019/05/20	12:11:05	0.0164	-2.033	56.498
2019/05/20	12:12:05	0.0331	-2.061	54.968
2019/05/20	12:13:05	0.0497	-2.134	53.834
2019/05/20	12:14:05	0.0664	31.013	53.276
2019/05/20	12:15:05	0.0831	31.251	53.024
2019/05/20	12:16:05	0.0997	31.641	53.654
2019/05/20	12:17:05	0.1164	32.338	56.804
2019/05/20	12:18:05	0.1331	33.428	64.976
2019/05/20	12:19:05	0.1497	34.867	78.098
POOH Gradient: 3130.000 ft				
2019/05/20	12:19:35	0.1581	64.346	94.496
2019/05/20	12:20:05	0.1664	64.302	100.256
2019/05/20	12:21:05	0.1831	64.202	104.468
2019/05/20	12:22:05	0.1997	64.324	106.232
2019/05/20	12:23:05	0.2164	64.318	107.042
2019/05/20	12:24:05	0.2331	64.256	107.384
2019/05/20	12:25:05	0.2497	64.236	107.546
2019/05/20	12:26:05	0.2664	64.210	107.636
2019/05/20	12:27:05	0.2831	64.156	107.690
2019/05/20	12:28:05	0.2997	64.205	107.744
2019/05/20	12:29:05	0.3164	64.163	107.762
2019/05/20	12:30:05	0.3331	64.118	107.798
2019/05/20	12:31:05	0.3497	64.085	107.798
2019/05/20	12:32:05	0.3664	64.098	107.816
2019/05/20	12:33:05	0.3831	64.044	107.852
2019/05/20	12:34:05	0.3997	64.050	107.870
2019/05/20	12:35:05	0.4164	64.036	107.888
2019/05/20	12:36:05	0.4331	64.028	107.906
2019/05/20	12:37:05	0.4497	64.049	107.852
2019/05/20	12:38:05	0.4664	64.030	107.870
2019/05/20	12:39:05	0.4831	64.053	107.906
2019/05/20	12:40:05	0.4997	63.967	107.906
2019/05/20	12:41:05	0.5164	64.007	107.906
2019/05/20	12:42:05	0.5331	63.998	107.888
2019/05/20	12:43:05	0.5497	64.010	107.870
2019/05/20	12:44:05	0.5664	63.998	107.906
2019/05/20	12:45:05	0.5831	64.015	107.960
2019/05/20	12:46:05	0.5997	63.975	107.996
2019/05/20	12:47:05	0.6164	63.960	107.978
2019/05/20	12:48:05	0.6331	63.999	107.960
2019/05/20	12:49:05	0.6497	64.002	107.978
2019/05/20	12:50:05	0.6664	63.967	107.978
2019/05/20	12:51:05	0.6831	63.995	107.960
2019/05/20	12:52:05	0.6997	63.996	107.960
2019/05/20	12:53:05	0.7164	63.920	107.942
2019/05/20	12:54:05	0.7331	63.933	107.906
2019/05/20	12:55:05	0.7497	63.972	107.960
2019/05/20	12:56:05	0.7664	63.902	107.978
2019/05/20	12:57:05	0.7831	63.954	107.978
2019/05/20	12:58:05	0.7997	63.920	107.996
2019/05/20	12:59:05	0.8164	63.956	107.978
2019/05/20	13:00:05	0.8331	63.907	107.978
2019/05/20	13:01:05	0.8497	63.902	107.924

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/20	13:02:05	0.8664	63.907	107.924
2019/05/20	13:03:05	0.8831	63.940	107.942
2019/05/20	13:04:05	0.8997	63.915	107.960
2019/05/20	13:05:05	0.9164	63.931	107.996
2019/05/20	13:06:05	0.9331	63.931	107.960
2019/05/20	13:07:05	0.9497	63.937	108.014
2019/05/20	13:08:05	0.9664	63.965	108.032
2019/05/20	13:09:05	0.9831	63.922	108.014
2019/05/20	13:10:05	0.9997	63.892	108.032
2019/05/20	13:11:05	1.0164	63.902	108.014
2019/05/20	13:12:05	1.0331	63.951	107.996
2019/05/20	13:13:05	1.0497	63.920	107.996
2019/05/20	13:13:35	1.0581	63.922	107.996
2019/05/20	13:14:35	1.0747	63.909	108.014
2019/05/20	13:15:35	1.0914	63.924	107.996
2019/05/20	13:16:35	1.1081	63.925	108.014
2019/05/20	13:17:35	1.1247	63.880	107.996
2019/05/20	13:18:35	1.1414	63.912	107.978
2019/05/20	13:19:35	1.1581	56.566	107.960
POOH Gradient: 3000.000 ft				
2019/05/20	13:20:35	1.1747	35.088	105.980
2019/05/20	13:21:35	1.1914	35.103	105.764
2019/05/20	13:22:35	1.2081	35.092	105.620
2019/05/20	13:23:35	1.2247	35.056	105.476
2019/05/20	13:24:35	1.2414	35.060	105.350
2019/05/20	13:25:35	1.2581	35.059	105.224
2019/05/20	13:26:35	1.2747	34.951	105.116
POOH Gradient: 2500.000 ft				
2019/05/20	13:27:35	1.2914	34.607	104.630
2019/05/20	13:28:35	1.3081	34.345	103.622
2019/05/20	13:29:35	1.3247	34.293	102.992
2019/05/20	13:30:35	1.3414	34.243	102.398
2019/05/20	13:31:35	1.3581	34.242	101.822
2019/05/20	13:32:35	1.3747	34.233	101.300
2019/05/20	13:33:35	1.3914	34.156	100.796
2019/05/20	13:34:35	1.4081	34.000	100.076
POOH Gradient: 2000.000 ft				
2019/05/20	13:35:35	1.4247	33.737	99.158
2019/05/20	13:36:35	1.4414	33.504	98.132
2019/05/20	13:37:35	1.4581	33.478	97.448
2019/05/20	13:38:35	1.4747	33.473	96.818
2019/05/20	13:39:35	1.4914	33.407	96.206
2019/05/20	13:40:35	1.5081	33.393	95.648
2019/05/20	13:41:35	1.5247	33.373	95.090
2019/05/20	13:42:35	1.5414	33.177	94.298
POOH Gradient: 1500.000 ft				
2019/05/20	13:43:05	1.5497	33.003	93.830
2019/05/20	13:43:35	1.5581	32.889	93.326
2019/05/20	13:44:35	1.5747	32.662	92.264
2019/05/20	13:45:35	1.5914	32.668	91.598
2019/05/20	13:46:35	1.6081	32.662	90.932
2019/05/20	13:47:35	1.6247	32.651	90.284
2019/05/20	13:48:35	1.6414	32.633	89.654
2019/05/20	13:49:35	1.6581	32.481	88.952

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Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
POOH Gradient: 1000.000 ft				
2019/05/20	13:50:35	1.6747	32.256	87.890
2019/05/20	13:51:35	1.6914	32.016	86.540
2019/05/20	13:52:35	1.7081	31.991	85.550
2019/05/20	13:53:35	1.7247	31.974	84.740
2019/05/20	13:54:35	1.7414	31.950	83.948
2019/05/20	13:55:35	1.7581	31.923	83.174
2019/05/20	13:56:35	1.7747	31.908	82.436
2019/05/20	13:57:35	1.7914	31.710	81.428
POOH Gradient: 500.000 ft				
2019/05/20	13:58:35	1.8081	31.498	80.168
2019/05/20	13:59:35	1.8247	31.347	78.764
2019/05/20	14:00:35	1.8414	31.324	77.684
2019/05/20	14:01:35	1.8581	31.301	76.676
2019/05/20	14:02:35	1.8747	31.274	75.686
2019/05/20	14:03:35	1.8914	31.253	74.732
2019/05/20	14:04:35	1.9081	31.172	73.814
2019/05/20	14:05:35	1.9247	30.974	72.734
POOH Gradient: 0.000 ft				
2019/05/20	14:06:35	1.9414	30.764	71.582
2019/05/20	14:07:35	1.9581	30.674	70.232
2019/05/20	14:08:35	1.9747	30.661	69.242
2019/05/20	14:09:35	1.9914	30.639	68.270
2019/05/20	14:10:35	2.0081	30.625	67.334
2019/05/20	14:11:35	2.0247	30.610	66.452
2019/05/20	14:12:35	2.0414	-1.988	65.606
2019/05/20	14:13:35	2.0581	-1.981	64.706
2019/05/20	14:14:35	2.0747	-2.019	62.456
2019/05/20	14:15:35	2.0914	-2.013	60.800
2019/05/20	14:16:35	2.1081	-2.020	59.252
2019/05/20	14:17:35	2.1247	-2.064	58.010