

Pressure Test Report

NMOCB

MAY 22 2019

DISTRICT III

COMPANY INFORMATION

Company Name
Representative
Phone
Fax
Address

HILCORP
PRISCILLA SHORTY

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
 Kelly Bushing (KB)
 Casing Flange (CF)
 KB-CF
 Ground Level
Plug Back Total Depth
Total Depth
Production Casing
Production Tubing

ALLISON UNIT #2 POW
T32N, R6W, SEC 19
BASIN FRUITLAND COAL
OBSERVATION
3062-3134

12

6141
3600
3645
4 1/2 TO 3643
2 3/8 TO 3040

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
5/14/19
80

5/14/19 0920
5/14/19 1020

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

W1162
0-6000
3500

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

259.2 psig
129.0 deg F

Company Name HILCORP
Well Name ALLISON UNIT #2 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 5/14/19



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>
-------------	--------------------	---------------	-----------------	----------------

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

Company Name	HILCORP
Well Name	ALLISON UNIT #2 POW
Type of Test	POOH STATIC GRADIENT
Date(s) of Test	5/14/19



COMMENTS

Reported By

EXPERT DOWNHOLE SERVICES, INC.

RIH WITH 1.50 IMPRESSION BLOCK AND TAGGED FILL @3587 WLM. RIH WITH BHP GAUGE TO 3500 FOR 1 HOUR, THEN POOH MAKING 5 MINUTE STOPS PER REQUEST.

Company Name HILCORP
 Well Name ALLISON UNIT #2 POW
 Type of Test POOH STATIC GRADIENT
 Date(s) of Test 5/14/19



Pressure vs. Depth

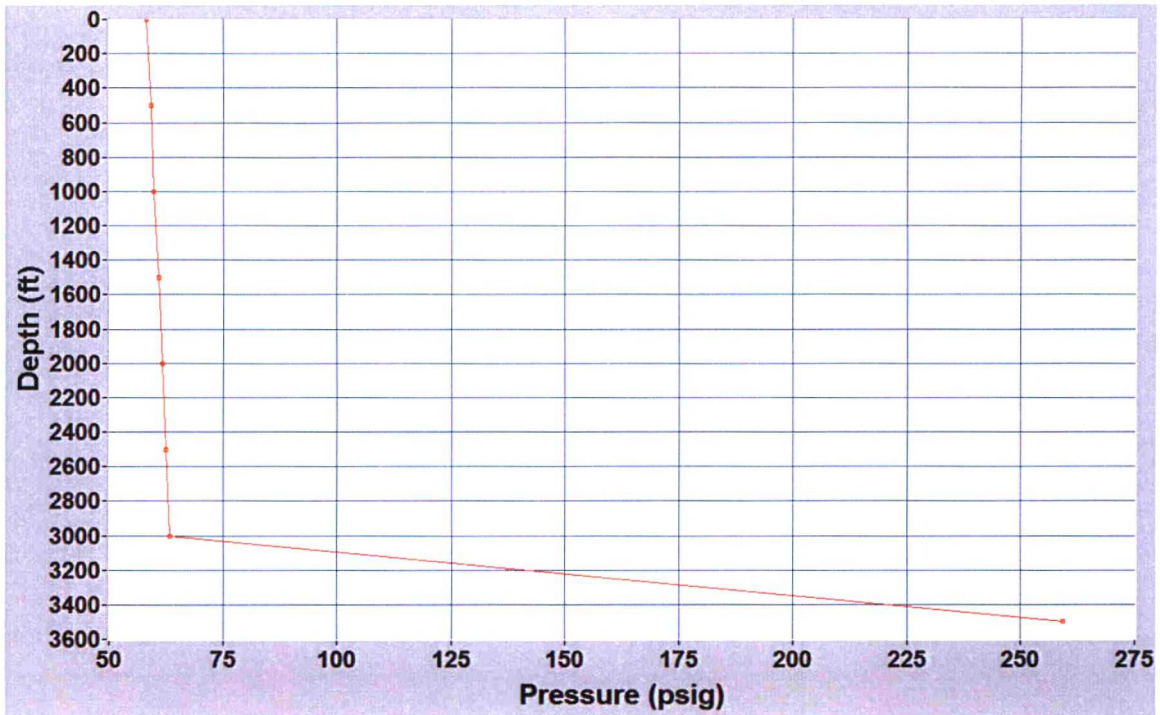
Probe Serial Number W1162

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
0920	1020	3500.000	259.187	-	118.958	-
1021	1026	3000.000	63.387	0.3916	120.902	-0.0039
1028	1033	2500.000	62.630	0.0015	115.304	0.0112
1034	1039	2000.000	61.715	0.0018	109.220	0.0122
1040	1045	1500.000	60.896	0.0016	100.490	0.0175
1046	1051	1000.000	60.005	0.0018	92.732	0.0155
1052	1057	500.000	59.219	0.0016	83.336	0.0188
1058	1103	0.000	58.307	0.0018	76.028	0.0146

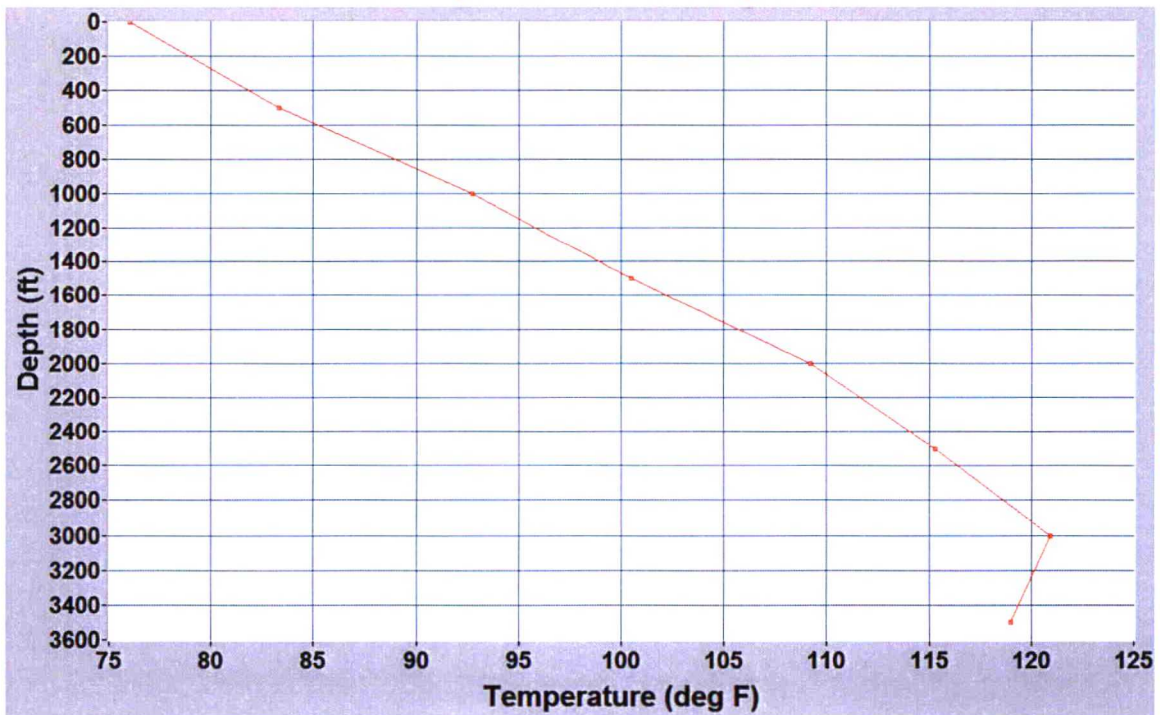
Extrapolated to MPP:

(ft)	(psig)	(deg F)
0.000		

W1162 Depth vs. Pressure



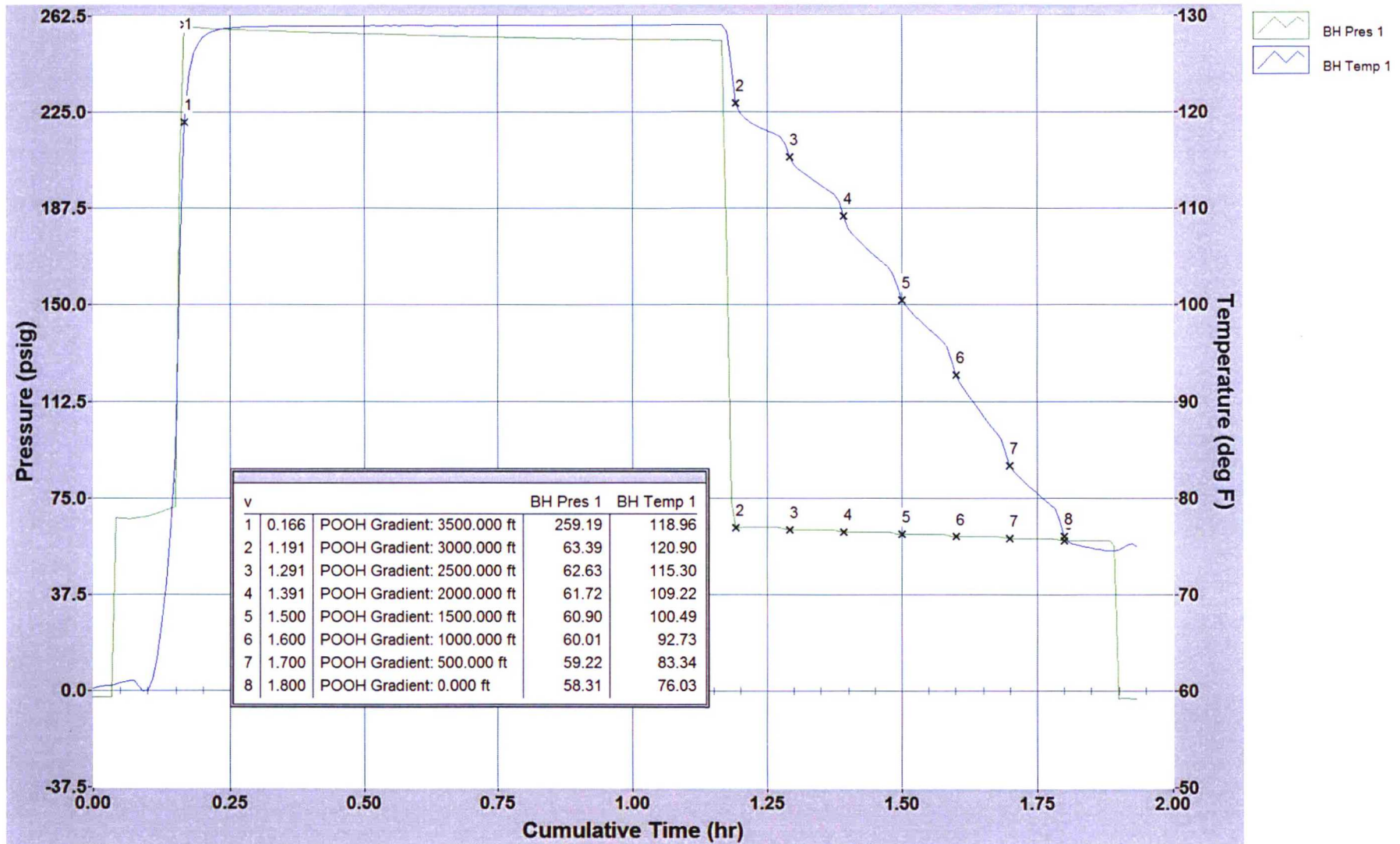
W1162 Depth vs. Temperature



Company Name HILCORP
 Well Name ALLISON UNIT #2 POW
 Type of Test POOH STATIC GRADIENT
 Date(s) of Test 5/14/19



ALLISON UNIT #2 POW



Company Name HILCORP
Well Name ALLISON UNIT #2 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 5/14/19



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/14	09:10:25	0.0000	-2.467	60.242
2019/05/14	09:10:54	0.0081	-2.534	60.350
2019/05/14	09:11:54	0.0247	-2.621	60.476
2019/05/14	09:12:54	0.0414	67.347	60.692
2019/05/14	09:13:54	0.0581	67.016	60.890
2019/05/14	09:14:24	0.0664	66.925	60.998
2019/05/14	09:15:24	0.0831	67.229	60.404
2019/05/14	09:16:24	0.0997	67.991	60.098
2019/05/14	09:17:24	0.1164	69.081	63.356
2019/05/14	09:17:54	0.1247	69.694	66.758
2019/05/14	09:18:54	0.1414	70.944	77.270
2019/05/14	09:19:54	0.1581	204.577	104.810
POOH Gradient: 3500.000 ft				
2019/05/14	09:20:24	0.1664	259.187	118.958
2019/05/14	09:20:54	0.1747	258.367	124.124
2019/05/14	09:21:54	0.1914	257.932	127.112
2019/05/14	09:22:54	0.2081	257.683	128.120
2019/05/14	09:23:54	0.2247	257.516	128.534
2019/05/14	09:24:54	0.2414	257.342	128.696
2019/05/14	09:25:24	0.2497	257.278	128.750
2019/05/14	09:26:24	0.2664	257.137	128.840
2019/05/14	09:27:24	0.2831	257.023	128.876
2019/05/14	09:28:24	0.2997	256.895	128.894
2019/05/14	09:28:54	0.3081	256.863	128.912
2019/05/14	09:29:54	0.3247	256.718	128.930
2019/05/14	09:30:54	0.3414	256.562	128.948
2019/05/14	09:31:54	0.3581	256.454	128.948
2019/05/14	09:32:24	0.3664	256.417	128.966
2019/05/14	09:33:24	0.3831	256.266	128.966
2019/05/14	09:34:24	0.3997	256.148	128.984
2019/05/14	09:35:24	0.4164	256.039	128.966
2019/05/14	09:36:24	0.4331	255.948	128.966
2019/05/14	09:37:24	0.4497	255.868	128.966
2019/05/14	09:38:24	0.4664	255.784	128.984
2019/05/14	09:39:24	0.4831	255.675	128.984
2019/05/14	09:39:54	0.4914	255.649	128.984
2019/05/14	09:40:54	0.5081	255.519	128.984
2019/05/14	09:41:54	0.5247	255.440	128.984
2019/05/14	09:42:54	0.5414	255.320	129.002
2019/05/14	09:43:24	0.5497	255.265	128.984
2019/05/14	09:44:24	0.5664	255.195	128.984
2019/05/14	09:45:24	0.5831	255.081	129.002
2019/05/14	09:46:24	0.5997	255.004	129.002
2019/05/14	09:46:54	0.6081	254.984	129.002
2019/05/14	09:47:54	0.6247	254.878	128.984
2019/05/14	09:48:54	0.6414	254.792	129.002
2019/05/14	09:49:54	0.6581	254.734	129.002
2019/05/14	09:50:54	0.6747	254.617	128.984
2019/05/14	09:51:54	0.6914	254.540	129.002
2019/05/14	09:52:54	0.7081	254.483	129.002
2019/05/14	09:53:54	0.7247	254.412	129.002
2019/05/14	09:54:24	0.7331	254.350	129.002
2019/05/14	09:55:24	0.7497	254.276	129.020
2019/05/14	09:56:24	0.7664	254.222	129.020

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/14	09:57:24	0.7831	254.122	129.002
2019/05/14	09:58:24	0.7997	254.087	129.020
2019/05/14	09:59:24	0.8164	253.978	129.002
2019/05/14	10:00:24	0.8331	253.935	129.020
2019/05/14	10:01:24	0.8497	253.844	129.020
2019/05/14	10:01:54	0.8581	253.820	129.020
2019/05/14	10:02:54	0.8747	253.770	129.020
2019/05/14	10:03:54	0.8914	253.681	129.002
2019/05/14	10:04:54	0.9081	253.625	129.002
2019/05/14	10:05:54	0.9247	253.565	129.020
2019/05/14	10:06:54	0.9414	253.493	129.002
2019/05/14	10:07:54	0.9581	253.452	129.020
2019/05/14	10:08:54	0.9747	253.398	129.002
2019/05/14	10:09:24	0.9831	253.382	129.020
2019/05/14	10:10:24	0.9997	253.336	129.002
2019/05/14	10:11:24	1.0164	253.290	129.020
2019/05/14	10:12:24	1.0331	253.265	129.020
2019/05/14	10:12:54	1.0414	253.175	129.002
2019/05/14	10:13:54	1.0581	253.171	129.020
2019/05/14	10:14:54	1.0747	253.084	129.002
2019/05/14	10:15:54	1.0914	253.076	129.002
2019/05/14	10:16:24	1.0997	253.013	129.020
2019/05/14	10:17:24	1.1164	252.973	129.020
2019/05/14	10:18:24	1.1331	252.917	129.020
2019/05/14	10:19:24	1.1497	252.852	129.020
2019/05/14	10:20:24	1.1664	252.836	129.020
2019/05/14	10:21:24	1.1831	73.907	124.844
POOH Gradient: 3000.000 ft				
2019/05/14	10:21:54	1.1914	63.387	120.902
2019/05/14	10:22:24	1.1997	63.566	119.858
2019/05/14	10:23:24	1.2164	63.679	118.994
2019/05/14	10:23:54	1.2247	63.645	118.688
2019/05/14	10:24:54	1.2414	63.615	118.220
2019/05/14	10:25:54	1.2581	63.598	117.824
2019/05/14	10:26:54	1.2747	63.337	117.410
2019/05/14	10:27:24	1.2831	62.943	116.618
POOH Gradient: 2500.000 ft				
2019/05/14	10:27:54	1.2914	62.630	115.304
2019/05/14	10:28:24	1.2997	62.653	114.494
2019/05/14	10:29:24	1.3164	62.655	113.684
2019/05/14	10:30:24	1.3331	62.614	113.000
2019/05/14	10:30:54	1.3414	62.626	112.676
2019/05/14	10:31:54	1.3581	62.579	112.046
2019/05/14	10:32:54	1.3747	62.548	111.452
POOH Gradient: 2000.000 ft				
2019/05/14	10:33:54	1.3914	61.715	109.220
2019/05/14	10:34:54	1.4081	61.769	107.348
2019/05/14	10:35:54	1.4247	61.756	106.376
2019/05/14	10:36:54	1.4414	61.783	105.494
2019/05/14	10:37:54	1.4581	61.728	104.648
2019/05/14	10:38:24	1.4664	61.701	104.270
2019/05/14	10:39:24	1.4831	61.410	103.244
POOH Gradient: 1500.000 ft				
2019/05/14	10:40:24	1.4997	60.896	100.490

Company Name HILCORP
Well Name ALLISON UNIT #2 POW
Type of Test POOH STATIC GRADIENT
Date(s) of Test 5/14/19



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2019/05/14	10:41:24	1.5164	60.923	99.338
2019/05/14	10:41:54	1.5247	60.925	98.870
2019/05/14	10:42:54	1.5414	60.913	97.952
2019/05/14	10:43:54	1.5581	60.878	97.088
2019/05/14	10:44:54	1.5747	60.885	96.242
2019/05/14	10:45:24	1.5831	60.663	95.720
POOH Gradient: 1000.000 ft				
2019/05/14	10:46:24	1.5997	60.005	92.732
2019/05/14	10:47:24	1.6164	60.069	91.148
2019/05/14	10:48:24	1.6331	60.104	89.816
2019/05/14	10:49:24	1.6497	60.067	88.556
2019/05/14	10:50:24	1.6664	60.034	87.368
2019/05/14	10:51:24	1.6831	59.808	86.126
POOH Gradient: 500.000 ft				
2019/05/14	10:52:24	1.6997	59.219	83.336
2019/05/14	10:52:54	1.7081	59.261	82.670
2019/05/14	10:53:54	1.7247	59.264	81.752
2019/05/14	10:54:54	1.7414	59.244	80.888
2019/05/14	10:55:54	1.7581	59.242	80.060
2019/05/14	10:56:54	1.7747	59.231	79.268
2019/05/14	10:57:54	1.7914	58.608	77.594
POOH Gradient: 0.000 ft				
2019/05/14	10:58:24	1.7997	58.307	76.028
2019/05/14	10:58:54	1.8081	58.385	75.434
2019/05/14	10:59:54	1.8247	58.424	75.110
2019/05/14	11:00:24	1.8331	58.421	75.002
2019/05/14	11:01:24	1.8497	58.391	74.804
2019/05/14	11:02:24	1.8664	58.346	74.642
2019/05/14	11:03:24	1.8831	58.331	74.498
2019/05/14	11:04:24	1.8997	-3.049	74.624
2019/05/14	11:05:24	1.9164	-2.938	75.146