

Johnston Federal 22
API# 30-045-26740

OIL CONS. DIV DIST. 3

MAY 25 2016

Pressure Test Report

COMPANY INFORMATION

Company Name	ConocoPhillips
Representative	Priscilla Shorty
Phone	
Fax	
Address	

E-Mail Address	
Service Company	Expert Downhole Services, Inc

WELL INFORMATION

Well Name	Johnston Federal #22 POW
Well Location	T31N, R9W, Sec. 33
Field and Pool	Basin Fruitland Coal
Status (Oil, Gas, Water, Injection)	Observation
Perforated Intervals	2547-2980
Mid-point of Perforated Intervals (MPP)	
Drilling Rig Number	
Elevations	
Kelly Bushing (KB)	11.5
Casing Flange (CF)	
KB-CF	
Ground Level	6313
Plug Back Total Depth	3448
Total Depth	3450
Production Casing	4 1/2 to 2294
Production Tubing	2 3/8 to 2999

TEST INFORMATION

Type of Test	POOH Static Gradient
Date(s) of Test	5/18/2016
Dead-weight Gauge Tubing Pressure	50
Dead-weight Gauge Casing Pressure	0
Shut-in Date (Duration)	
Date / Time on Bottom	5/18/16 @0835
Date / Time off Bottom	5/18/16 @0935
Probe Serial Number	W1036
Probe Offset from End of Tool String	0-6000
Run Depth at Probe Pressure Port	3054

PRESSURE TEST RESULTS

Maximum Recorded Probe Pressure	57.1 psig
Maximum Recorded Probe Temperature	111.7 deg F
Final Buildup Pressure	
Gradient Survey Information	
Extrapolated Pressure to MPP	
Final Gradient at Depth	
Job Number	

Company Name ConocoPhillips
Well Name Johnston Federal #22 POW
Type of Test POOH Static Gradient
Date(s) of Test 5/18/2016



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

Company Name	ConocoPhillips
Well Name	Johnston Federal #22 POW
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Date(s) of Test	5/18/2016



COMMENTS

Reported By

Expert Downhole Services, Inc

RIH with 1.50 IB and tagged fill @ 3060 WLM. RIH with memory gauge to 3054 for 1 hour, then POOH making 5 minute gradient stops.

Company Name GonocoPhillips
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Pressure vs. Depth

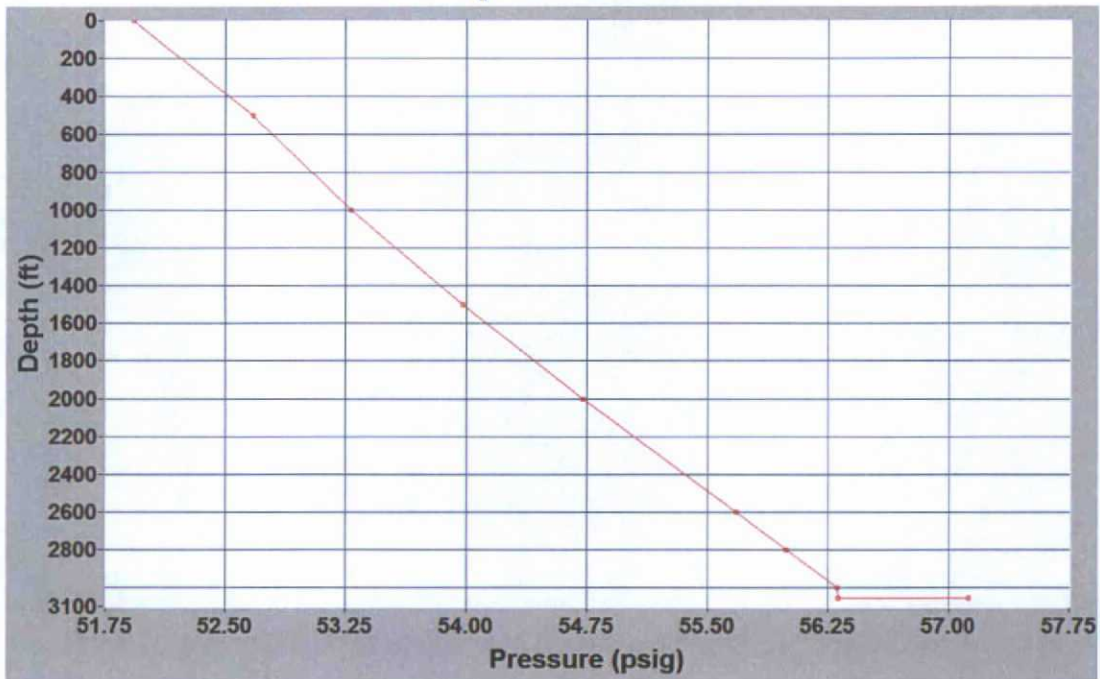
Probe Serial Number W1036

		(ft)	(psig)	(psi/ft)	(deg F)	(deg F/ft)
		3054.000	57.125	-	84.310	-
0835	0935	3054.000	56.314	-	111.720	-
0935	0940	3000.000	56.309	0.0001	111.740	-0.0004
0941	0946	2800.000	55.991	0.0016	111.294	0.0022
0946	0951	2600.000	55.681	0.0016	107.935	0.0168
0952	0957	2000.000	54.727	0.0016	102.727	0.0087
0958	1003	1500.000	53.975	0.0015	96.721	0.0120
1004	1009	1000.000	53.284	0.0014	88.986	0.0155
1010	1015	500.000	52.676	0.0012	82.922	0.0121
1016	1021	0.000	51.930	0.0015	75.704	0.0144

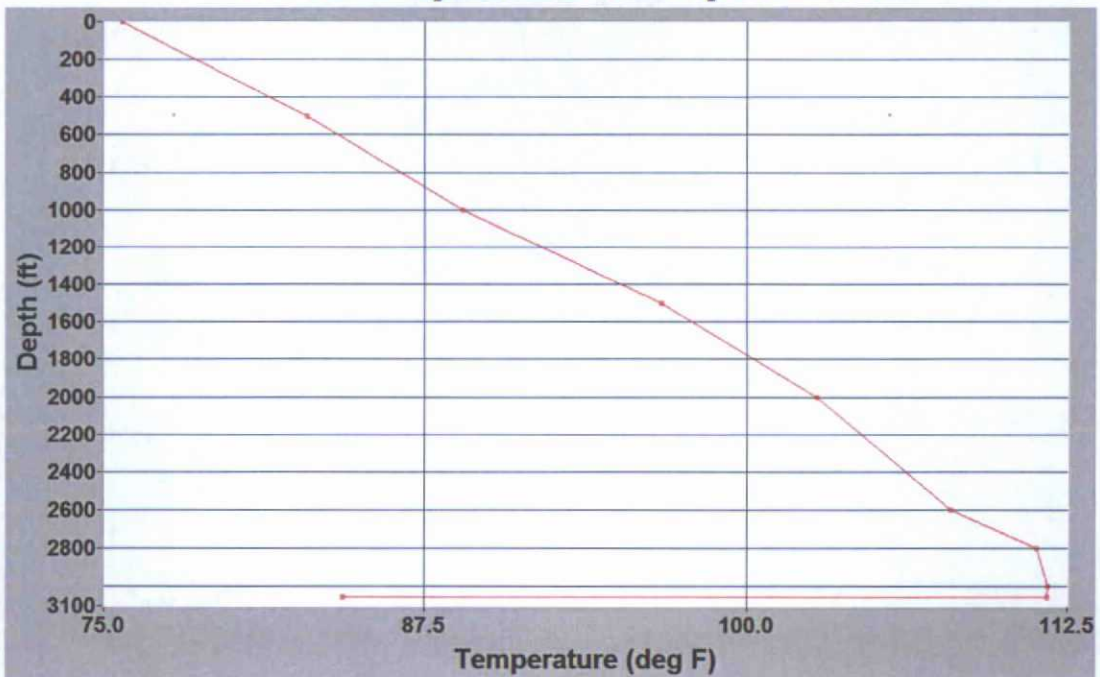
Extrapolated to MPP:

(ft)	(psig)	(deg F)
0.000		

W1036 Depth vs. Pressure



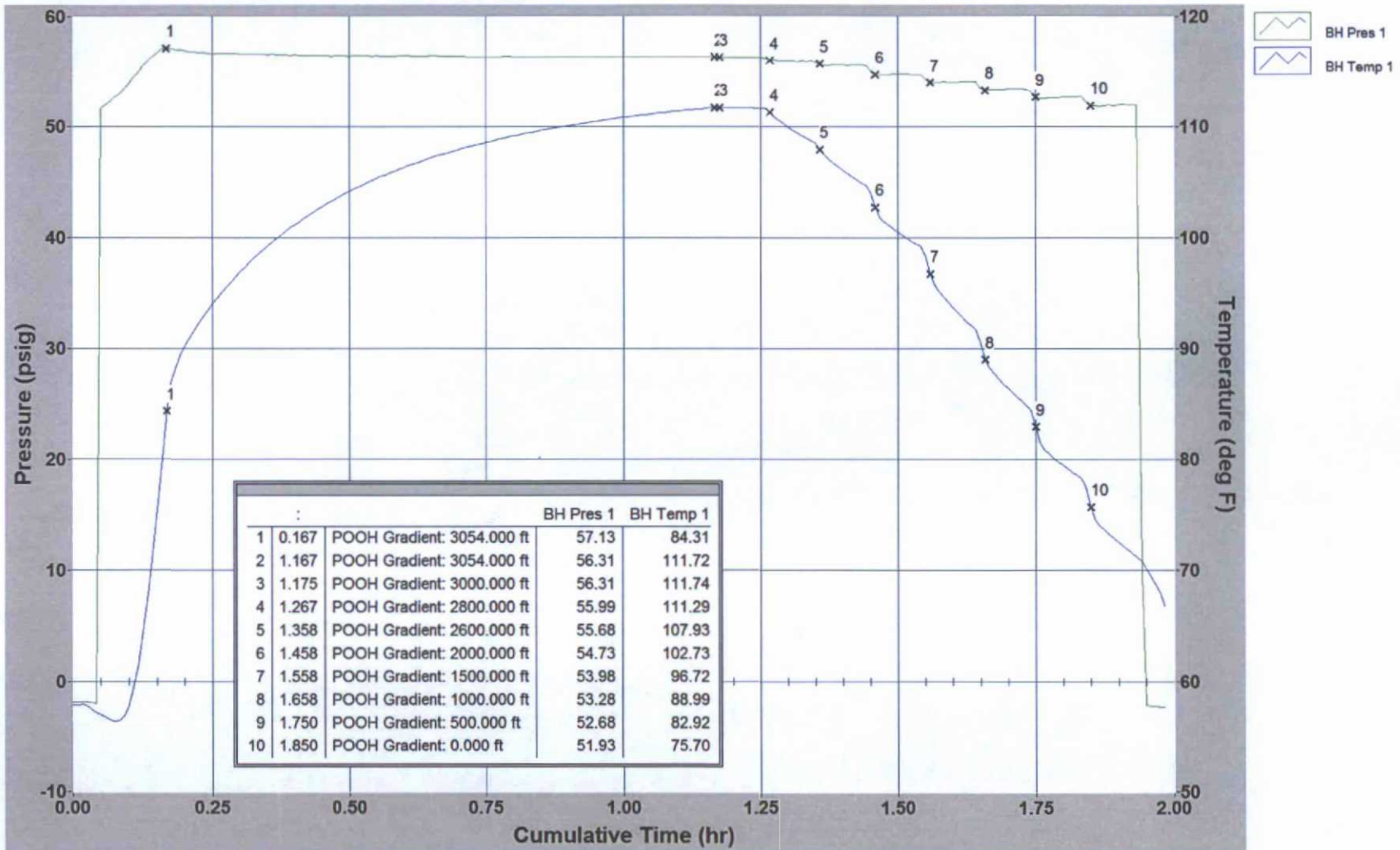
W1036 Depth vs. Temperature



Company Name ConocoPhillips
 Well Name Johnston Federal #22 POW
 Type of Test POOH Static Gradient
 Date(s) of Test 5/18/2016



Johnston Federal #22 POW



Company Name ConocoPhillips
Well Name Johnston Federal #22 POW
Type of Test POOH Static Gradient
Date(s) of Test 5/18/2016



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2016/05/19	08:25:15	0.0000	-1.845	57.888
2016/05/19	08:25:45	0.0083	-1.858	57.918
2016/05/19	08:26:15	0.0167	-1.835	57.933
2016/05/19	08:26:45	0.0250	-1.819	57.857
2016/05/19	08:27:15	0.0333	-1.905	57.495
2016/05/19	08:27:45	0.0417	-1.966	57.173
2016/05/19	08:28:15	0.0500	51.669	56.961
2016/05/19	08:28:45	0.0583	51.954	56.770
2016/05/19	08:29:15	0.0667	52.325	56.536
2016/05/19	08:29:45	0.0750	52.683	56.377
2016/05/19	08:30:15	0.0833	52.938	56.446
2016/05/19	08:30:45	0.0917	53.403	56.887
2016/05/19	08:31:15	0.1000	53.845	57.852
2016/05/19	08:31:45	0.1083	54.435	59.448
2016/05/19	08:32:15	0.1167	54.927	61.639
2016/05/19	08:32:45	0.1250	55.516	64.497
2016/05/19	08:33:15	0.1333	55.941	67.883
2016/05/19	08:33:45	0.1417	56.377	71.515
2016/05/19	08:34:15	0.1500	56.697	75.517
2016/05/19	08:34:45	0.1583	57.119	79.990
POOH Gradient: 3054.000 ft				
2016/05/19	08:35:15	0.1667	57.125	84.310
2016/05/19	08:35:45	0.1750	57.107	86.904
2016/05/19	08:36:15	0.1833	56.985	88.326
2016/05/19	08:36:45	0.1917	57.003	89.348
2016/05/19	08:37:15	0.2000	56.912	90.196
2016/05/19	08:37:45	0.2083	56.811	90.948
2016/05/19	08:38:15	0.2167	56.810	91.638
2016/05/19	08:38:45	0.2250	56.724	92.286
2016/05/19	08:39:15	0.2333	56.743	92.894
2016/05/19	08:39:45	0.2417	56.668	93.474
2016/05/19	08:40:15	0.2500	56.630	94.019
2016/05/19	08:40:45	0.2583	56.683	94.546
2016/05/19	08:41:15	0.2667	56.659	95.059
2016/05/19	08:41:45	0.2750	56.690	95.551
2016/05/19	08:42:15	0.2833	56.700	96.019
2016/05/19	08:42:45	0.2917	56.644	96.465
2016/05/19	08:43:15	0.3000	56.591	96.895
2016/05/19	08:43:45	0.3083	56.580	97.318
2016/05/19	08:44:15	0.3167	56.620	97.734
2016/05/19	08:44:45	0.3250	56.625	98.121
2016/05/19	08:45:15	0.3333	56.578	98.506
2016/05/19	08:45:45	0.3417	56.591	98.879
2016/05/19	08:46:15	0.3500	56.548	99.232
2016/05/19	08:46:45	0.3583	56.590	99.579
2016/05/19	08:47:15	0.3667	56.551	99.907
2016/05/19	08:47:45	0.3750	56.540	100.238
2016/05/19	08:48:15	0.3833	56.542	100.548
2016/05/19	08:48:45	0.3917	56.507	100.854
2016/05/19	08:49:15	0.4000	56.536	101.151
2016/05/19	08:49:45	0.4083	56.503	101.437
2016/05/19	08:50:15	0.4167	56.509	101.718
2016/05/19	08:50:45	0.4250	56.477	101.998
2016/05/19	08:51:15	0.4333	56.477	102.267

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2016/05/19	08:51:45	0.4417	56.459	102.524
2016/05/19	08:52:15	0.4500	56.483	102.785
2016/05/19	08:52:45	0.4583	56.465	103.017
2016/05/19	08:53:15	0.4667	56.439	103.251
2016/05/19	08:53:45	0.4750	56.480	103.487
2016/05/19	08:54:15	0.4833	56.457	103.698
2016/05/19	08:54:45	0.4917	56.446	103.919
2016/05/19	08:55:15	0.5000	56.442	104.137
2016/05/19	08:55:45	0.5083	56.466	104.349
2016/05/19	08:56:15	0.5167	56.445	104.551
2016/05/19	08:56:45	0.5250	56.454	104.752
2016/05/19	08:57:15	0.5333	56.461	104.943
2016/05/19	08:57:45	0.5417	56.441	105.134
2016/05/19	08:58:15	0.5500	56.445	105.310
2016/05/19	08:58:45	0.5583	56.434	105.496
2016/05/19	08:59:15	0.5667	56.416	105.667
2016/05/19	08:59:45	0.5750	56.438	105.832
2016/05/19	09:00:15	0.5833	56.421	106.000
2016/05/19	09:00:45	0.5917	56.502	106.162
2016/05/19	09:01:15	0.6000	56.481	106.317
2016/05/19	09:01:45	0.6083	56.460	106.475
2016/05/19	09:02:15	0.6167	56.444	106.628
2016/05/19	09:02:45	0.6250	56.430	106.770
2016/05/19	09:03:15	0.6333	56.416	106.911
2016/05/19	09:03:45	0.6417	56.403	107.051
2016/05/19	09:04:15	0.6500	56.471	107.184
2016/05/19	09:04:45	0.6583	56.452	107.321
2016/05/19	09:05:15	0.6667	56.437	107.445
2016/05/19	09:05:45	0.6750	56.426	107.566
2016/05/19	09:06:15	0.6833	56.415	107.685
2016/05/19	09:06:45	0.6917	56.403	107.811
2016/05/19	09:07:15	0.7000	56.392	107.926
2016/05/19	09:07:45	0.7083	56.387	108.041
2016/05/19	09:08:15	0.7167	56.376	108.160
2016/05/19	09:08:45	0.7250	56.366	108.266
2016/05/19	09:09:15	0.7333	56.357	108.372
2016/05/19	09:09:45	0.7417	56.347	108.477
2016/05/19	09:10:15	0.7500	56.353	108.577
2016/05/19	09:10:45	0.7583	56.349	108.680
2016/05/19	09:11:15	0.7667	56.340	108.781
2016/05/19	09:11:45	0.7750	56.376	108.883
2016/05/19	09:12:15	0.7833	56.393	108.977
2016/05/19	09:12:45	0.7917	56.385	109.076
2016/05/19	09:13:15	0.8000	56.377	109.164
2016/05/19	09:13:45	0.8083	56.370	109.252
2016/05/19	09:14:15	0.8167	56.362	109.342
2016/05/19	09:14:45	0.8250	56.356	109.422
2016/05/19	09:15:45	0.8417	56.362	109.587
2016/05/19	09:16:15	0.8500	56.356	109.663
2016/05/19	09:16:45	0.8583	56.350	109.746
2016/05/19	09:17:15	0.8667	56.372	109.819
2016/05/19	09:17:45	0.8750	56.367	109.891
2016/05/19	09:18:15	0.8833	56.362	109.960
2016/05/19	09:18:45	0.8917	56.357	110.025

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Date(s) of Test 5/18/2016



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2016/05/19	09:19:15	0.9000	56.351	110.104
2016/05/19	09:19:45	0.9083	56.346	110.170
2016/05/19	09:20:15	0.9167	56.341	110.239
2016/05/19	09:20:45	0.9250	56.337	110.298
2016/05/19	09:21:15	0.9333	56.355	110.359
2016/05/19	09:21:45	0.9417	56.368	110.422
2016/05/19	09:22:15	0.9500	56.363	110.493
2016/05/19	09:22:45	0.9583	56.353	110.552
2016/05/19	09:23:15	0.9667	56.349	110.610
2016/05/19	09:23:45	0.9750	56.345	110.671
2016/05/19	09:24:15	0.9833	56.342	110.727
2016/05/19	09:24:45	0.9917	56.339	110.779
2016/05/19	09:25:15	1.0000	56.335	110.836
2016/05/19	09:25:45	1.0083	56.332	110.890
2016/05/19	09:26:15	1.0167	56.328	110.944
2016/05/19	09:26:45	1.0250	56.325	110.998
2016/05/19	09:27:15	1.0333	56.322	111.049
2016/05/19	09:27:45	1.0417	56.320	111.092
2016/05/19	09:28:15	1.0500	56.318	111.137
2016/05/19	09:28:45	1.0583	56.314	111.195
2016/05/19	09:29:15	1.0667	56.328	111.245
2016/05/19	09:29:45	1.0750	56.326	111.288
2016/05/19	09:30:15	1.0833	56.325	111.326
2016/05/19	09:30:45	1.0917	56.320	111.366
2016/05/19	09:31:15	1.1000	56.336	111.402
2016/05/19	09:31:45	1.1083	56.331	111.448
2016/05/19	09:32:15	1.1167	56.326	111.492
2016/05/19	09:32:45	1.1250	56.321	111.535
2016/05/19	09:33:15	1.1333	56.319	111.573
2016/05/19	09:33:45	1.1417	56.318	111.607
2016/05/19	09:34:15	1.1500	56.317	111.643
2016/05/19	09:34:45	1.1583	56.315	111.684
POOH Gradient: 3054.000 ft				
2016/05/19	09:35:15	1.1667	56.314	111.720
POOH Gradient: 3000.000 ft				
2016/05/19	09:35:45	1.1750	56.309	111.740
2016/05/19	09:36:15	1.1833	56.307	111.736
2016/05/19	09:36:45	1.1917	56.300	111.724
2016/05/19	09:37:15	1.2000	56.294	111.720
2016/05/19	09:37:45	1.2083	56.292	111.713
2016/05/19	09:38:15	1.2167	56.290	111.706
2016/05/19	09:38:45	1.2250	56.289	111.697
2016/05/19	09:39:15	1.2333	56.287	111.682
2016/05/19	09:39:45	1.2417	56.285	111.679
2016/05/19	09:40:15	1.2500	56.283	111.670
2016/05/19	09:40:45	1.2583	56.244	111.668
POOH Gradient: 2800.000 ft				
2016/05/19	09:41:15	1.2667	55.991	111.294
2016/05/19	09:41:45	1.2750	55.997	110.896
2016/05/19	09:42:15	1.2833	55.974	110.574
2016/05/19	09:42:45	1.2917	55.956	110.269
2016/05/19	09:43:15	1.3000	55.986	109.981
2016/05/19	09:43:45	1.3083	55.969	109.715
2016/05/19	09:44:15	1.3167	55.905	109.441

Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2016/05/19	09:44:45	1.3250	55.931	109.195
2016/05/19	09:45:15	1.3333	55.922	108.955
2016/05/19	09:45:45	1.3417	55.946	108.729
2016/05/19	09:46:15	1.3500	55.839	108.496
POOH Gradient: 2600.000 ft				
2016/05/19	09:46:45	1.3583	55.681	107.935
2016/05/19	09:47:15	1.3667	55.549	107.413
2016/05/19	09:47:45	1.3750	55.596	107.022
2016/05/19	09:48:15	1.3833	55.633	106.682
2016/05/19	09:48:45	1.3917	55.634	106.353
2016/05/19	09:49:15	1.4000	55.634	106.043
2016/05/19	09:49:45	1.4083	55.572	105.751
2016/05/19	09:50:15	1.4167	55.604	105.462
2016/05/19	09:50:45	1.4250	55.635	105.186
2016/05/19	09:51:15	1.4333	55.630	104.923
2016/05/19	09:51:45	1.4417	55.591	104.675
2016/05/19	09:52:15	1.4500	55.078	104.065
POOH Gradient: 2000.000 ft				
2016/05/19	09:52:45	1.4583	54.727	102.727
2016/05/19	09:53:15	1.4667	54.686	101.820
2016/05/19	09:53:45	1.4750	54.707	101.395
2016/05/19	09:54:15	1.4833	54.729	101.068
2016/05/19	09:54:45	1.4917	54.755	100.758
2016/05/19	09:55:15	1.5000	54.766	100.472
2016/05/19	09:55:45	1.5083	54.750	100.193
2016/05/19	09:56:15	1.5167	54.753	99.928
2016/05/19	09:56:45	1.5250	54.733	99.655
2016/05/19	09:57:15	1.5333	54.704	99.408
2016/05/19	09:57:45	1.5417	54.734	99.160
2016/05/19	09:58:15	1.5500	54.302	98.420
POOH Gradient: 1500.000 ft				
2016/05/19	09:58:45	1.5583	53.975	96.721
2016/05/19	09:59:15	1.5667	53.972	95.740
2016/05/19	09:59:45	1.5750	53.981	95.149
2016/05/19	10:00:15	1.5833	54.039	94.640
2016/05/19	10:00:45	1.5917	53.970	94.165
2016/05/19	10:01:15	1.6000	54.018	93.713
2016/05/19	10:01:45	1.6083	54.002	93.276
2016/05/19	10:02:15	1.6167	54.056	92.858
2016/05/19	10:02:45	1.6250	54.049	92.437
2016/05/19	10:03:15	1.6333	54.057	92.048
2016/05/19	10:03:45	1.6417	54.059	91.657
2016/05/19	10:04:15	1.6500	53.493	90.664
POOH Gradient: 1000.000 ft				
2016/05/19	10:04:45	1.6583	53.284	88.986
2016/05/19	10:05:15	1.6667	53.324	88.205
2016/05/19	10:05:45	1.6750	53.362	87.697
2016/05/19	10:06:15	1.6833	53.349	87.246
2016/05/19	10:06:45	1.6917	53.343	86.823
2016/05/19	10:07:15	1.7000	53.401	86.407
2016/05/19	10:07:45	1.7083	53.386	86.016
2016/05/19	10:08:15	1.7167	53.390	85.617
2016/05/19	10:08:45	1.7250	53.405	85.240
2016/05/19	10:09:15	1.7333	53.339	84.866

Company Name ConocoPhillips
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 Type of Test POOH Static Gradient
 Date(s) of Test 5/18/2016



Date	Time	Cum.Time BH1	BH Pres 1	BH Temp 1
		hr	psig	deg F
2016/05/19	10:09:45	1.7417	53.206	84.445
POOH Gradient: 500.000 ft				
2016/05/19	10:10:15	1.7500	52.676	82.922
2016/05/19	10:10:45	1.7583	52.534	81.419
2016/05/19	10:11:15	1.7667	52.591	80.841
2016/05/19	10:11:45	1.7750	52.649	80.447
2016/05/19	10:12:15	1.7833	52.632	80.105
2016/05/19	10:12:45	1.7917	52.626	79.776
2016/05/19	10:13:15	1.8000	52.673	79.459
2016/05/19	10:13:45	1.8083	52.718	79.153
2016/05/19	10:14:15	1.8167	52.706	78.849
2016/05/19	10:14:45	1.8250	52.716	78.559
2016/05/19	10:15:15	1.8333	52.749	78.278
2016/05/19	10:15:45	1.8417	52.310	77.542
POOH Gradient: 0.000 ft				
2016/05/19	10:16:15	1.8500	51.930	75.704
2016/05/19	10:16:45	1.8583	51.891	74.530
2016/05/19	10:17:15	1.8667	51.869	74.003
2016/05/19	10:17:45	1.8750	51.919	73.593
2016/05/19	10:18:15	1.8833	51.977	73.224
2016/05/19	10:18:45	1.8917	51.941	72.865
2016/05/19	10:19:15	1.9000	51.973	72.523
2016/05/19	10:19:45	1.9083	52.014	72.187
2016/05/19	10:20:15	1.9167	51.991	71.856
2016/05/19	10:20:45	1.9250	51.991	71.530
2016/05/19	10:21:15	1.9333	51.957	71.213
2016/05/19	10:21:45	1.9417	9.777	70.812
2016/05/19	10:22:15	1.9500	-2.098	70.185
2016/05/19	10:22:45	1.9583	-2.225	69.496
2016/05/19	10:23:15	1.9667	-2.226	68.734
2016/05/19	10:23:45	1.9750	-2.286	67.973