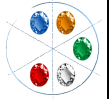




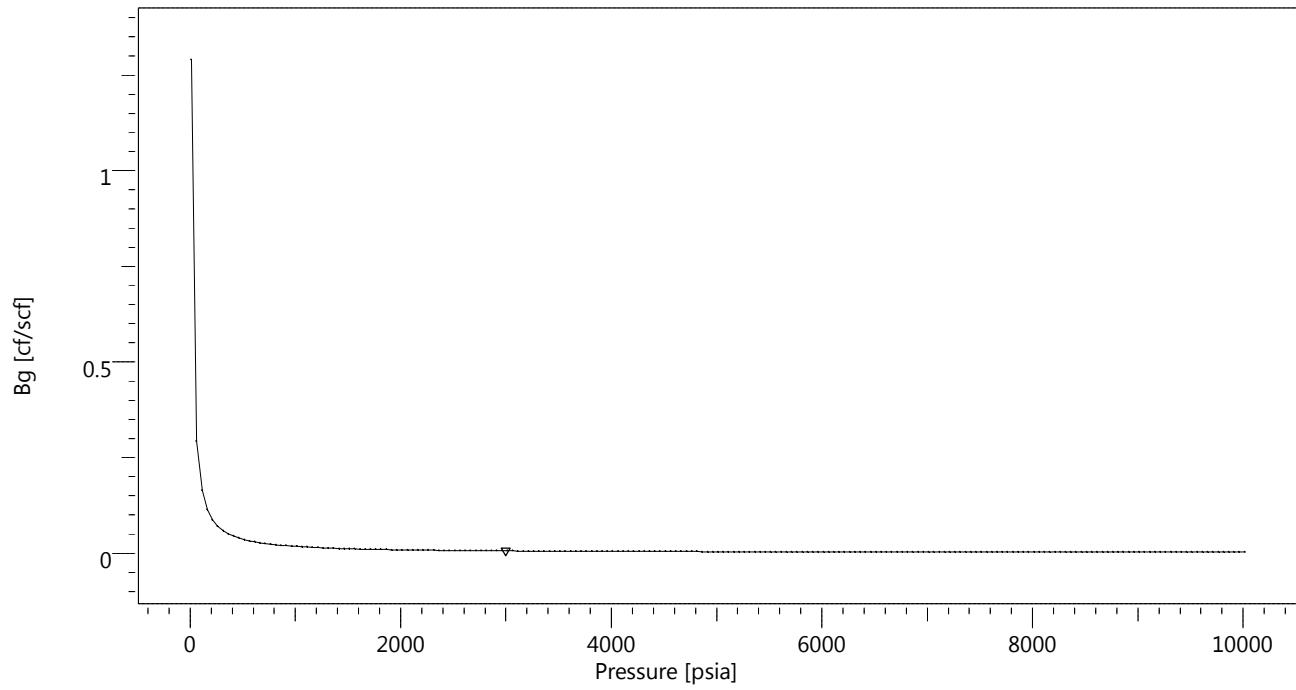
Bg

Untitled4



Company
Well Tested well

Field
Test Name / #

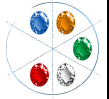


Bg Internal



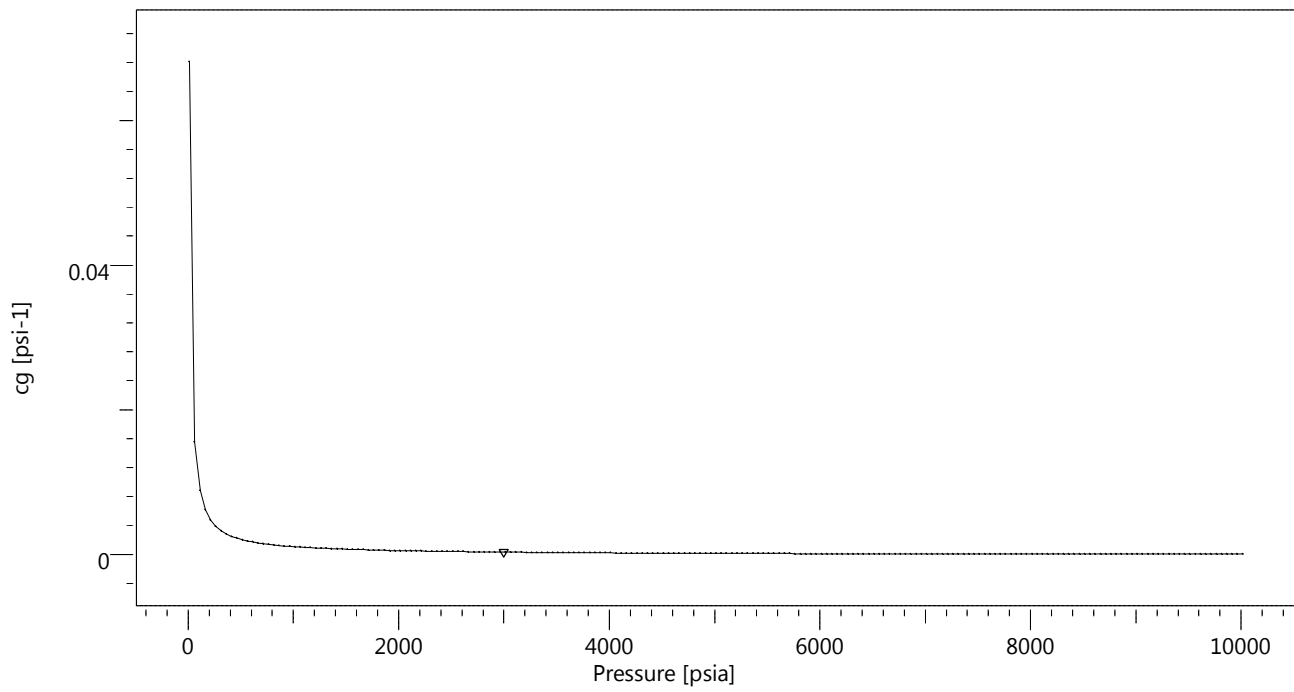
cg

Untitled4



Company
Well Tested well

Field
Test Name / #

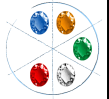


cg Dranchuk



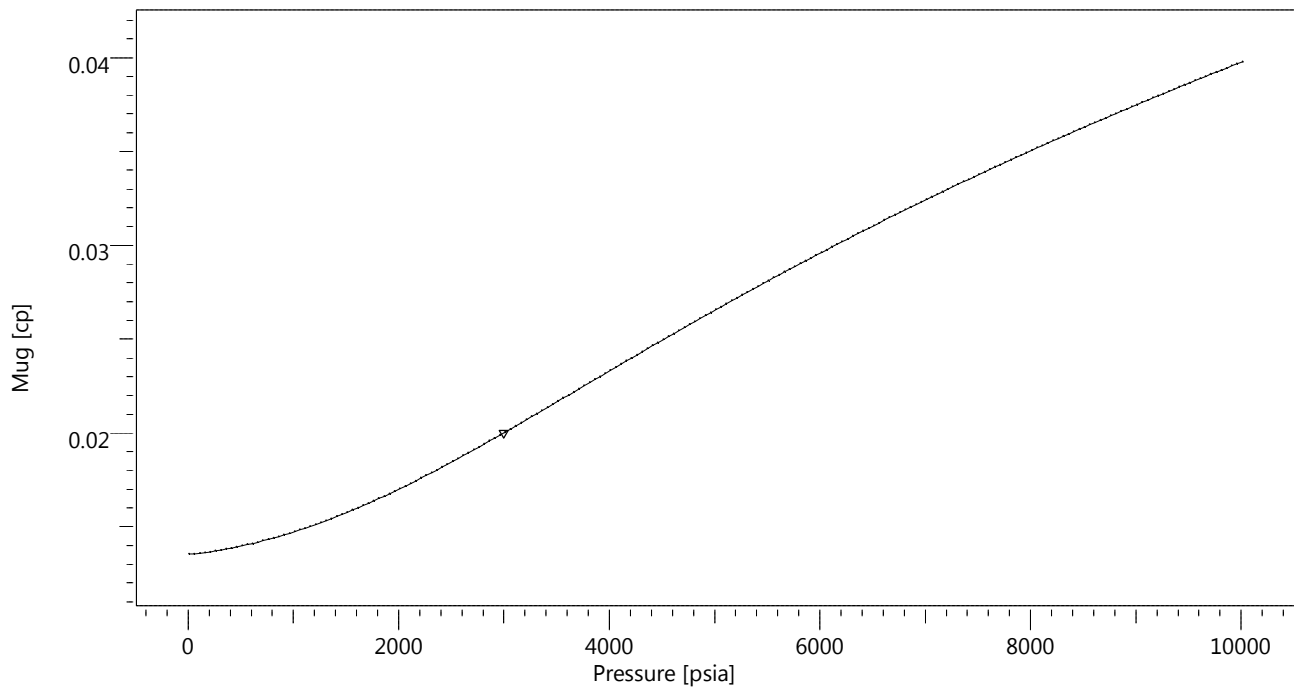
Mug

Untitled4



Company
Well Tested well

Field
Test Name / #

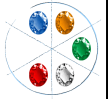


Mug Lee et al.



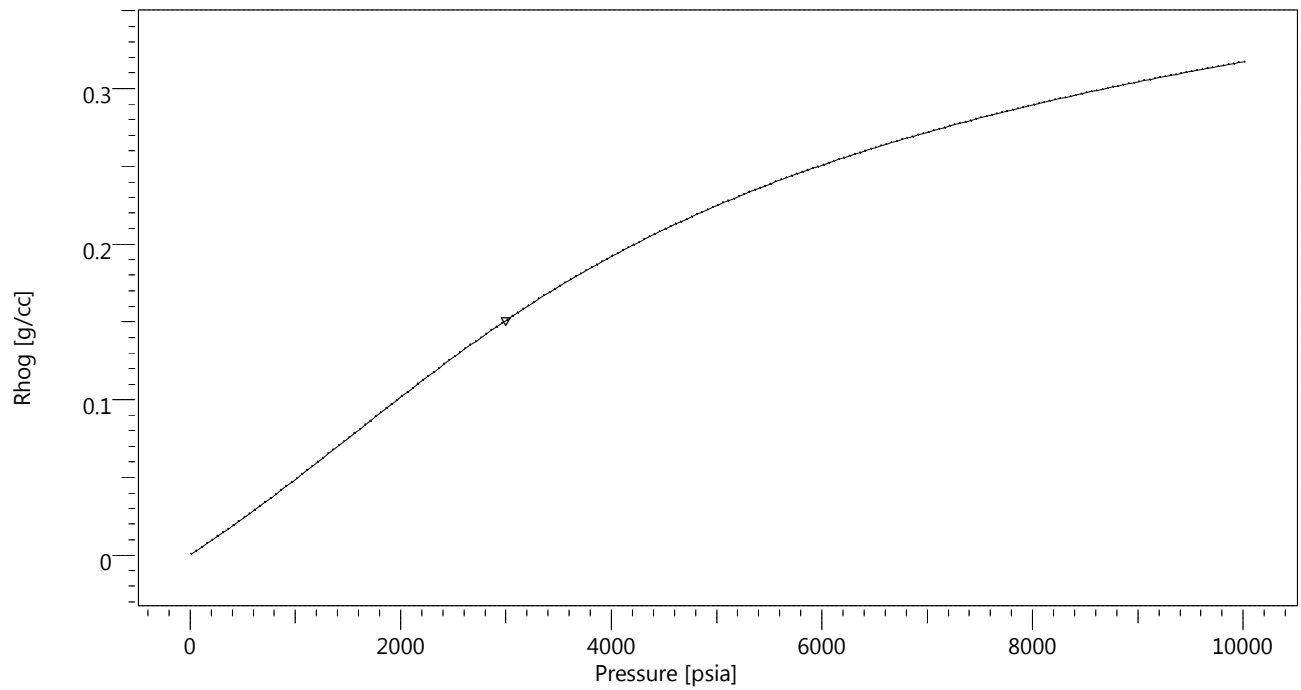
Rhog

Untitled4



Company
Well Tested well

Field
Test Name / #



Rhog Internal



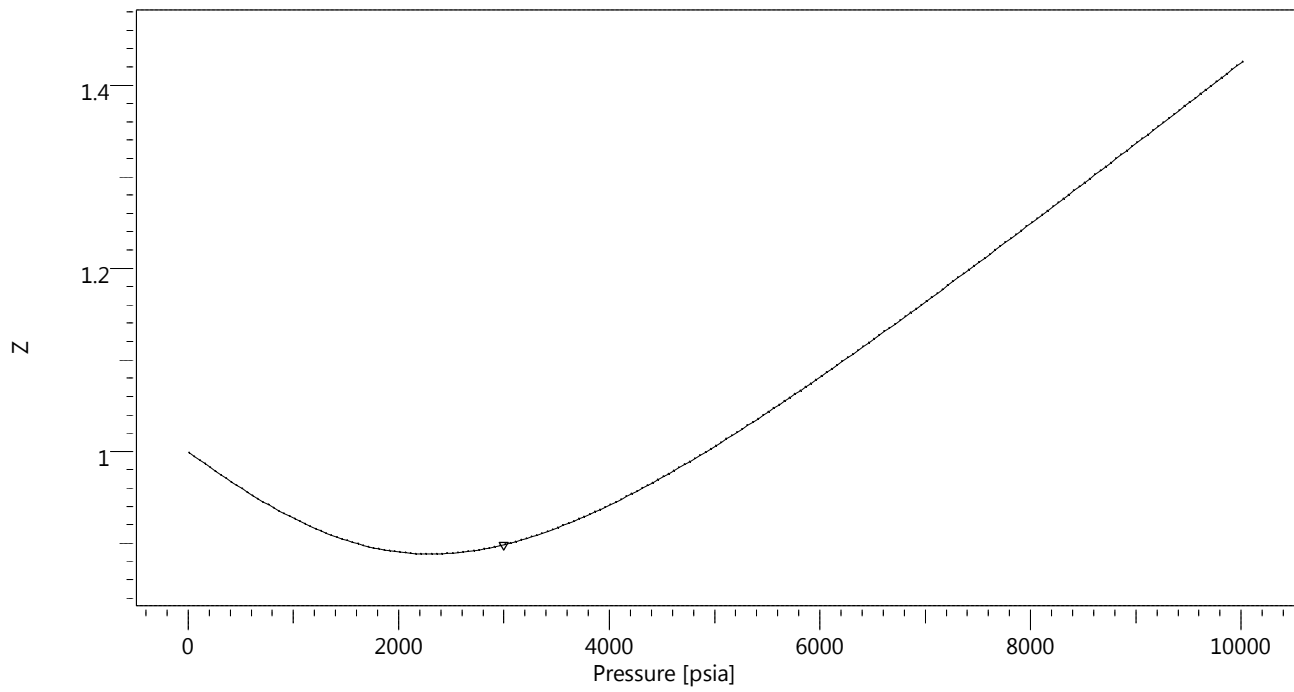
Z

Untitled4



Company
Well Tested well

Field
Test Name / #

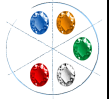


Z Dranchuk



History Listings

Untitled4



Company

Field

Well Tested well

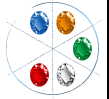
Test Name / #

Date	ToD	FP #	Gas rate Mscf/D	Duration hr
03/06/2020	00:00:00	1	1E+7	120
03/11/2020	00:00:00	2	0	240



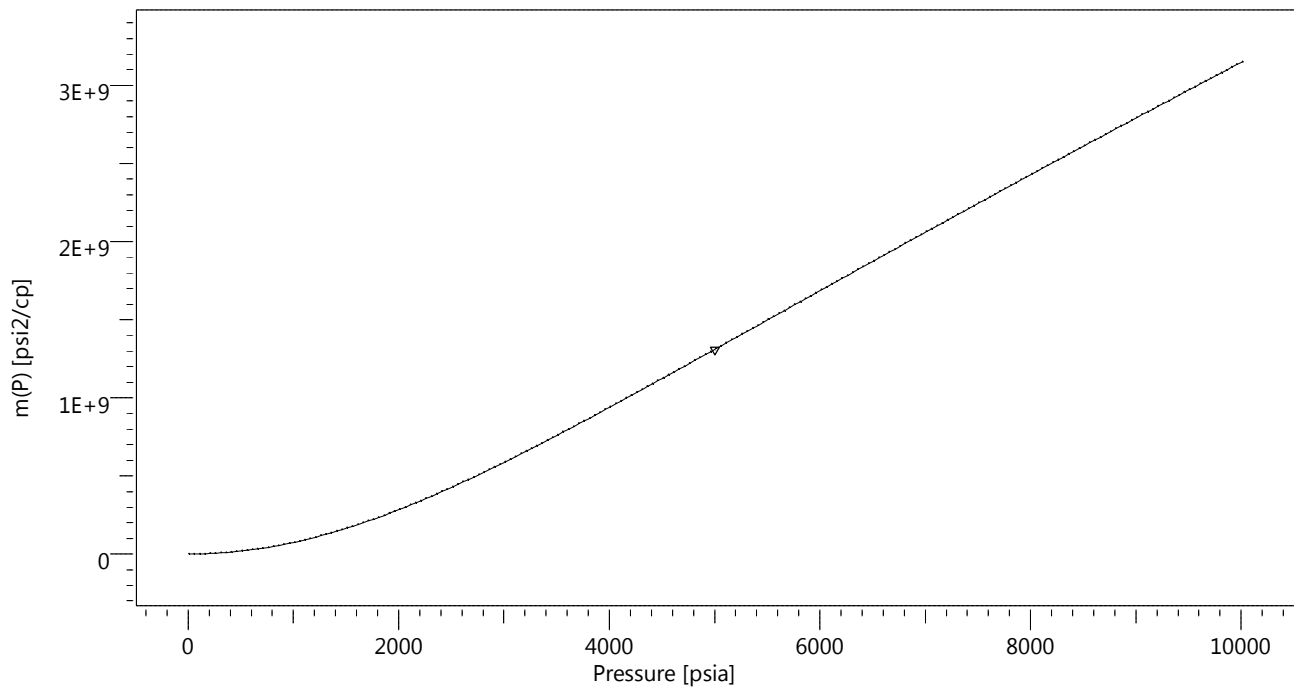
m(P)

Untitled4



Company
Well Tested well

Field
Test Name / #



WGR 0 bbl/MMcf
cf 3E-6 psi-1
Swr 0
Minimum 14.6959 psia
Maximum 10014.7 psia



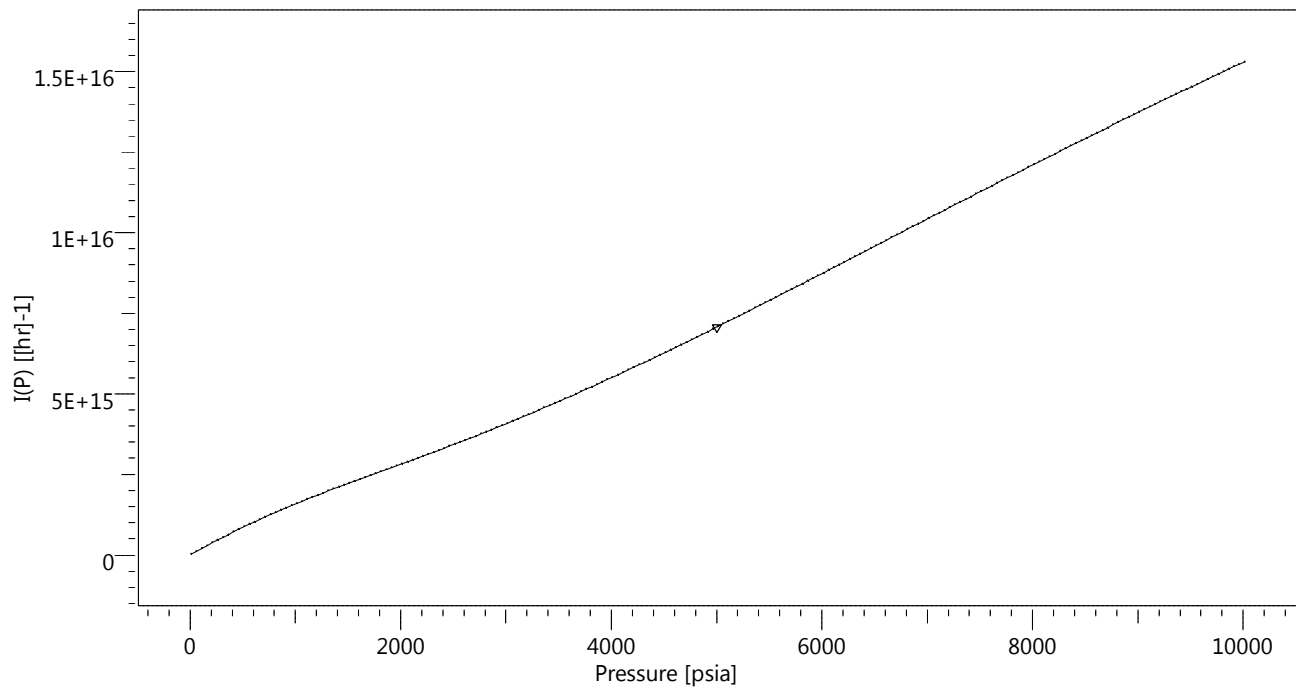
I(P)

Untitled4



Company
Well Tested well

Field
Test Name / #

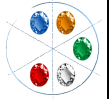


WGR 0 bbl/MMcf
cf 3E-6 psi-1
Swr 0
Minimum 14.6959 psia
Maximum 10014.7 psia



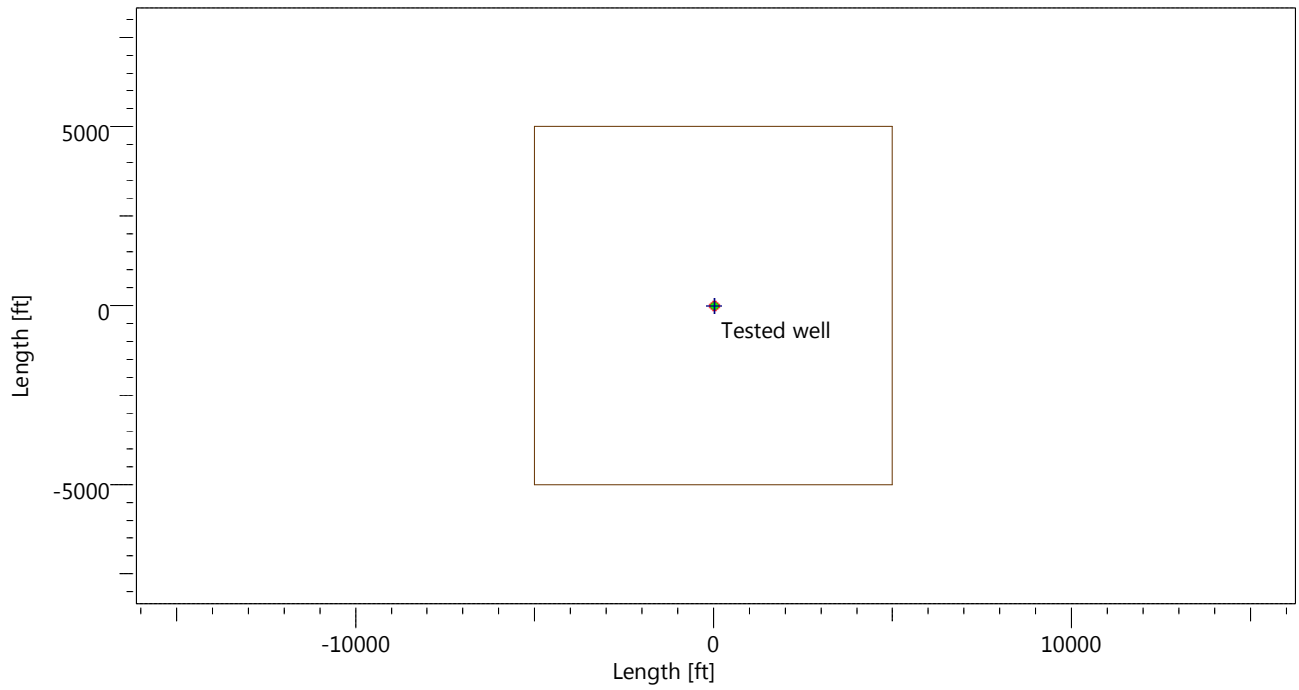
2D Geometry plot

NonLinear 1



Company
Well Tested well

Field
Test Name / #

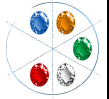


2D Geometry plot



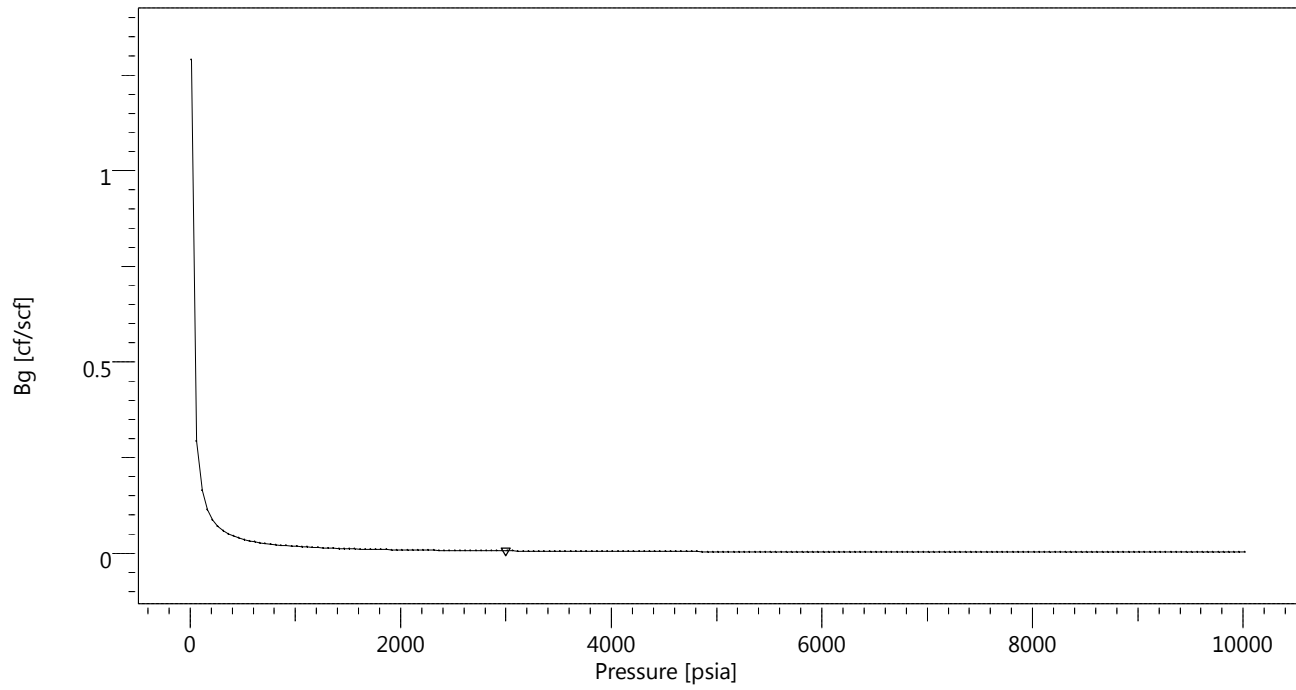
Bg

NonLinear 1



Company
Well Tested well

Field
Test Name / #



Bg Internal



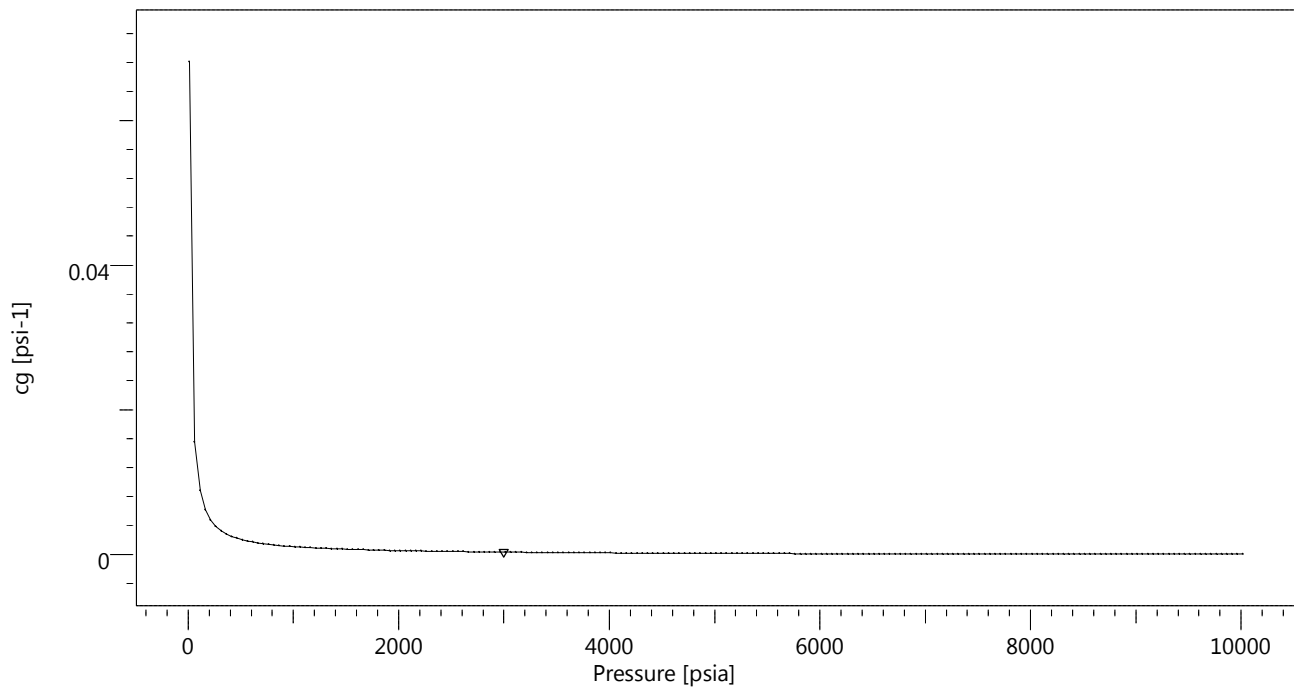
cg

NonLinear 1



Company
Well Tested well

Field
Test Name / #



cg Dranchuk



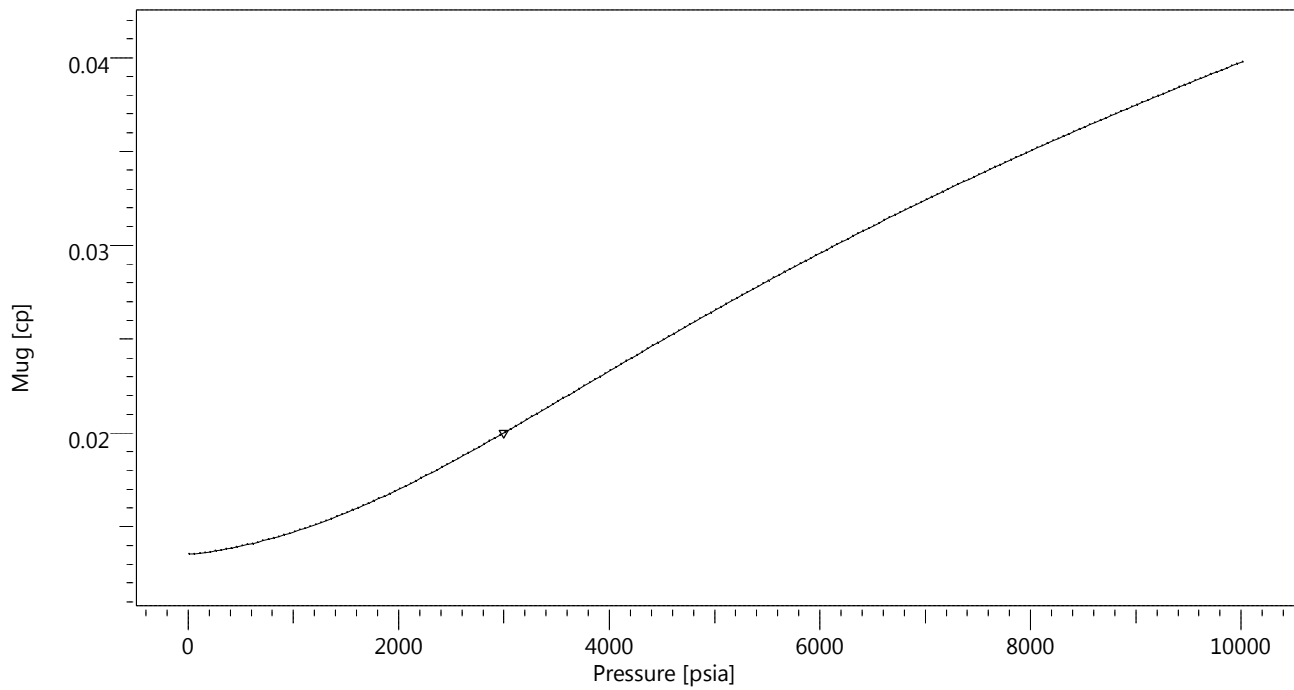
Mug

NonLinear 1



Company
Well Tested well

Field
Test Name / #



Mug Lee et al.



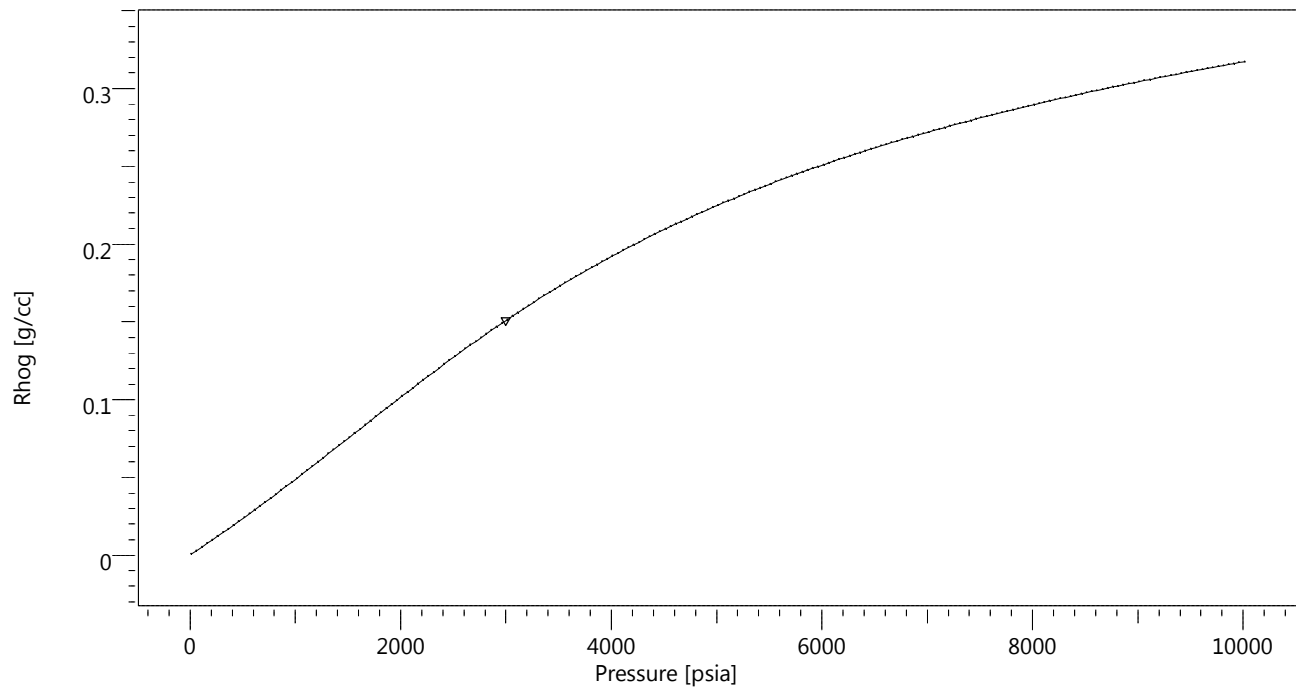
Rhog

NonLinear 1



Company
Well Tested well

Field
Test Name / #



Rhog Internal



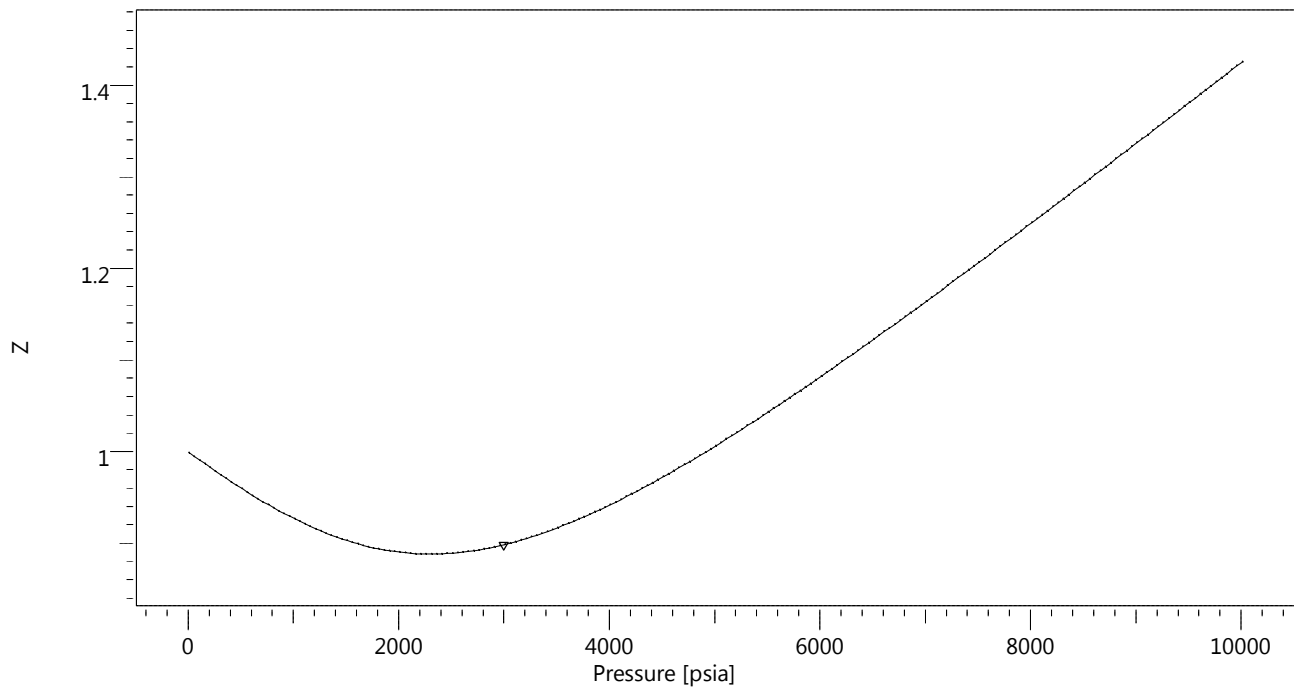
Z

NonLinear 1



Company
Well Tested well

Field
Test Name / #



Z Dranchuk



History plot

NonLinear 1

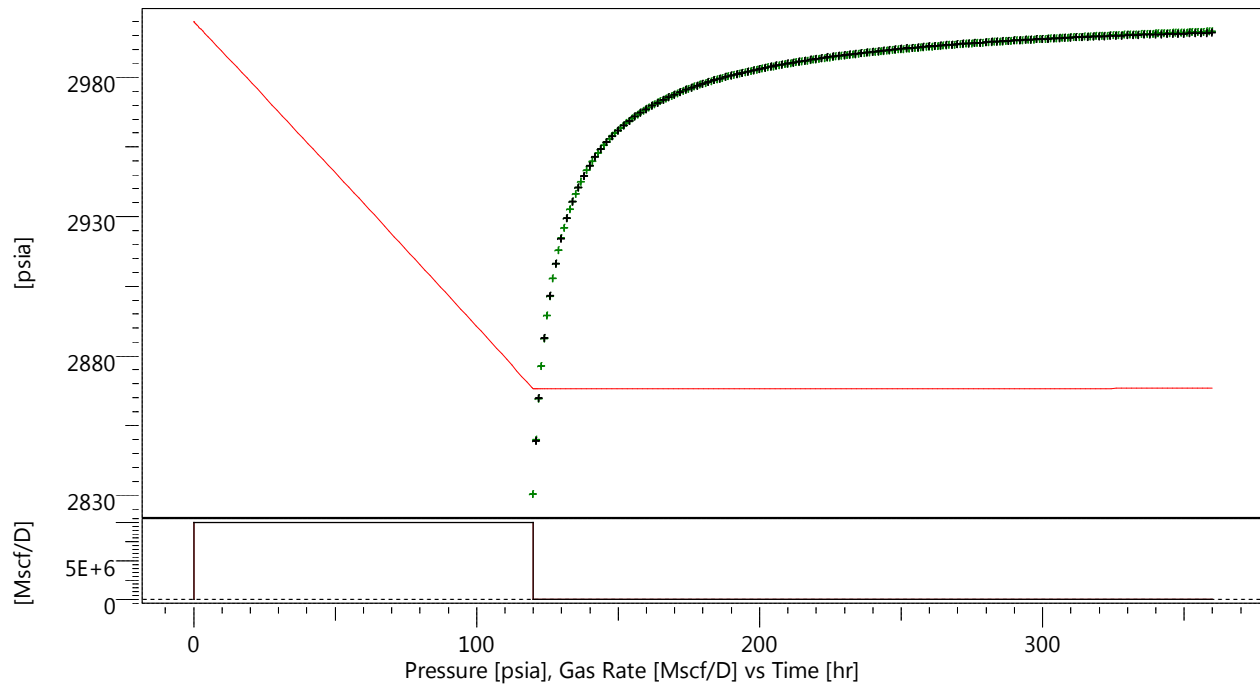


Company

Well Tested well

Field

Test Name / #



Pressure

Rate

- Gas rate
- Deconvolution q(t)
- ++ Deconvolution p(t)

Pressure Deconvolution

Rate 1E+7 Mscf/D
Rate change 1E+7 Mscf/D
P@dt=0 3000 psia
Pi 3000 psia
Smoothing 0.1

Selected Model

Model Option NonLinear
Well Vertical, Non Darcy Flow
Reservoir Homogeneous
Boundary Polygonal, No flow

Main Model Parameters

TMatch 2.97E-5 [hr]-1
PMatch 2.76E-5 [psia]-1
C 3.92E+5 bbl/psi
Total Skin -0.0668
k.h, total 789 md.ft
k, average 3.5 md
Pi 3000 psia

Model Parameters

Well & Wellbore parameters (Tested well)

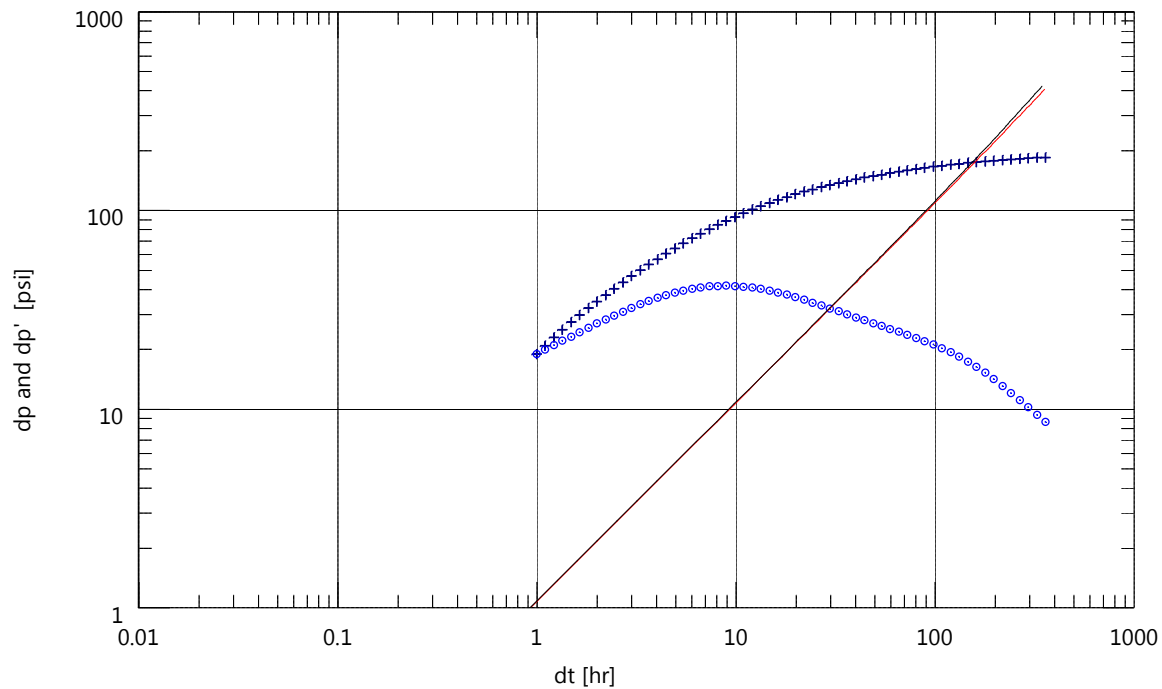
C 3.92E+5 bbl/psi
Skin -0.0668

Reservoir & Boundary parameters

Pi 3000 psia
k.h 789 md.ft
k 3.5 md
Beta 0 [ft]-1

Derived & Secondary Parameters

Delta P (Total Skin) -2421.23 psi
Delta P Ratio (Total Skin) -18.3885 Fraction

Company
Well Tested wellField
Test Name / #

Pressure Deconvolution

Rate 1E+7 Mscf/D
Rate change 1E+7 Mscf/D
P@dt=0 3000 psia
Pi 3000 psia
Smoothing 0.1

Selected Model

Model Option NonLinear
Well Vertical, Non Darcy Flow
Reservoir Homogeneous
Boundary Polygonal, No flow

Main Model Parameters

TMatch 2.97E-5 [hr]⁻¹
PMatch 2.76E-5 [psia]⁻¹
C 3.92E+5 bbl/psi
Total Skin -0.0668
k.h, total 789 md.ft
k, average 3.5 md
Pi 3000 psia

Model Parameters

Well & Wellbore parameters (Tested well)

C 3.92E+5 bbl/psi
Skin -0.0668

Reservoir & Boundary parameters

Pi 3000 psia
k.h 789 md.ft
k 3.5 md
Beta 0 [ft]⁻¹

Derived & Secondary Parameters

Delta P (Total Skin) -2421.23 psi
Delta P Ratio (Total Skin) -18.3885 Fraction



Main Results

NonLinear 1



Company
Well Tested well

Field
Test Name / #

Test date / time
Formation interval
Perforated interval
Gauge type / #
Gauge depth

TEST TYPE Standard

Porosity Phi (%) 20
Well Radius rw 0.25 ft
Pay Zone h 225 ft

Water Salt (ppm) 10000
Form. compr. 3E-6 psi-1
Reservoir T 212 °F
Reservoir P 3000 psia

FLUID TYPE Gas

Gas Gravity 0.7
Pseudo-Critical P 663.573 psia
Pseudo-Critical T 377.26 °R

Sour gas composition
Hydrogen sulphide 0
Carbon dioxide 0
Nitrogen 0

Temperature 212 °F
Pressure 3000 psia

Properties @ Reservoir T&P

Gas
Z 0.898072
Mug 0.0200074 cp
Bg 0.0056825 cf/scf
cg 3.01924E-4 psi-1
Rhog 0.150875 g/cc

Total Compr. ct 3.04924E-4 psi-1

Selected Model
Model Option NonLinear
Well Vertical, Non Darcy Flow
Reservoir Homogeneous
Boundary Polygonal, No flow

Main Model Parameters

TMatch 2.97E-5 [hr]-1
PMatch 2.76E-5 [psia]-1
C 3.92E+5 bbl/psi
Total Skin -0.0668
k.h, total 789 md.ft
k, average 3.5 md
Pi 3000 psia

Model Parameters

Well & Wellbore parameters (Tested well)
C 3.92E+5 bbl/psi
Skin -0.0668
Reservoir & Boundary parameters
Pi 3000 psia
k.h 789 md.ft
k 3.5 md
Beta 0 [ft]-1

Derived & Secondary Parameters

Delta P (Total Skin) -2421.23 psi
Delta P Ratio (Total Skin) -18.3885 Fraction



Pressure Listings

NonLinear 1



Company

Field

Well Tested well

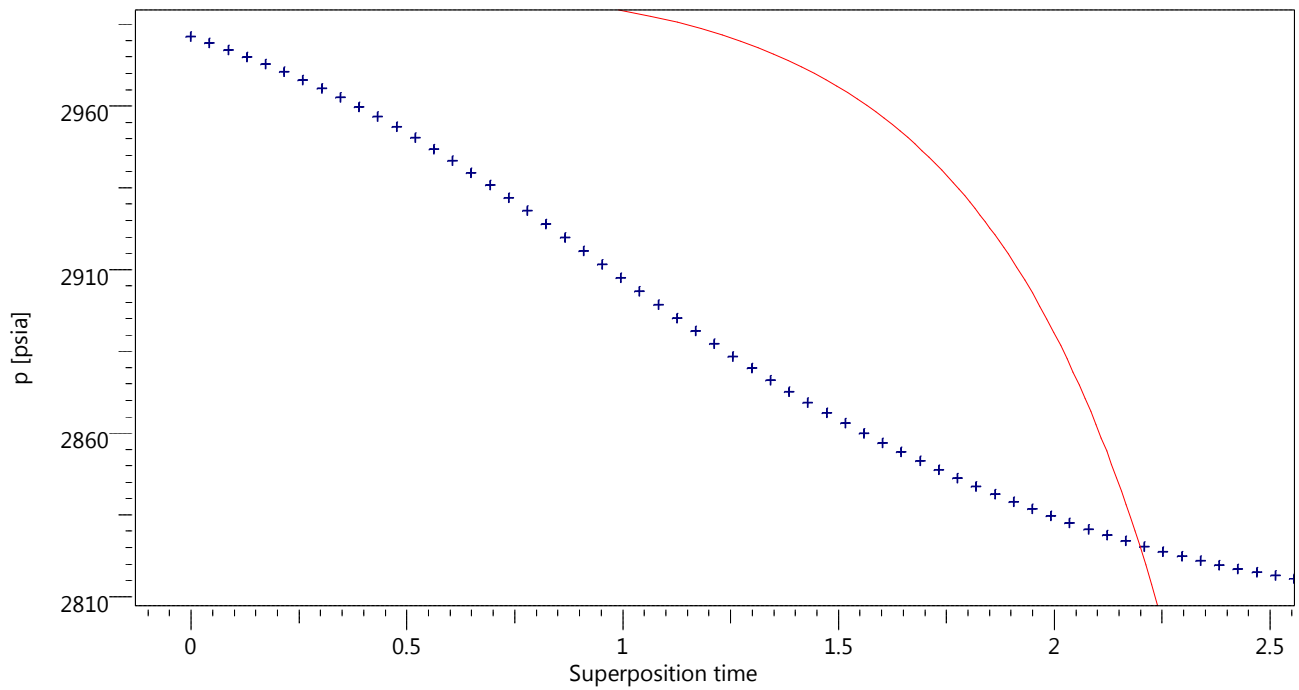
Test Name / #

Data psia	Time hr	Data psia	Time hr	Data psia	Time hr	Data psia	Time hr	Data psia	Time hr
2830.33	120	2974.58	172	2986.92	224	2992.12	276	2995.07	328
2849.74	121	2974.99	173	2987.06	225	2992.19	277	2995.12	329
2864.49	122	2975.39	174	2987.2	226	2992.26	278	2995.16	330
2876.31	123	2975.77	175	2987.33	227	2992.33	279	2995.2	331
2886.08	124	2976.15	176	2987.46	228	2992.4	280	2995.25	332
2894.31	125	2976.51	177	2987.59	229	2992.47	281	2995.29	333
2901.38	126	2976.86	178	2987.72	230	2992.54	282	2995.33	334
2907.59	127	2977.21	179	2987.85	231	2992.61	283	2995.38	335
2913.02	128	2977.55	180	2987.97	232	2992.67	284	2995.42	336
2917.82	129	2977.87	181	2988.09	233	2992.74	285	2995.46	337
2922.09	130	2978.19	182	2988.21	234	2992.8	286	2995.5	338
2925.92	131	2978.5	183	2988.33	235	2992.87	287	2995.54	339
2929.36	132	2978.81	184	2988.45	236	2992.93	288	2995.58	340
2932.49	133	2979.1	185	2988.57	237	2993	289	2995.62	341
2935.32	134	2979.39	186	2988.68	238	2993.06	290	2995.66	342
2937.92	135	2979.67	187	2988.79	239	2993.12	291	2995.7	343
2940.31	136	2979.95	188	2988.9	240	2993.18	292	2995.74	344
2942.5	137	2980.22	189	2989.01	241	2993.24	293	2995.78	345
2944.53	138	2980.48	190	2989.12	242	2993.31	294	2995.82	346
2946.42	139	2980.74	191	2989.23	243	2993.37	295	2995.86	347
2948.17	140	2980.99	192	2989.34	244	2993.43	296	2995.9	348
2949.81	141	2981.23	193	2989.44	245	2993.48	297	2995.94	349
2951.34	142	2981.48	194	2989.54	246	2993.54	298	2995.97	350
2952.78	143	2981.71	195	2989.64	247	2993.6	299	2996.01	351
2954.13	144	2981.94	196	2989.74	248	2993.66	300	2996.05	352
2955.41	145	2982.17	197	2989.84	249	2993.71	301	2996.09	353
2956.61	146	2982.39	198	2989.94	250	2993.77	302	2996.12	354
2957.75	147	2982.61	199	2990.04	251	2993.83	303	2996.16	355
2958.83	148	2982.82	200	2990.13	252	2993.88	304	2996.2	356
2959.86	149	2983.03	201	2990.23	253	2993.94	305	2996.23	357
2960.83	150	2983.23	202	2990.32	254	2993.99	306	2996.27	358
2961.76	151	2983.43	203	2990.41	255	2994.04	307	2996.3	359
2962.65	152	2983.63	204	2990.5	256	2994.1	308	2996.34	360
2963.49	153	2983.82	205	2990.59	257	2994.15	309		
2964.3	154	2984.01	206	2990.68	258	2994.2	310		
2965.08	155	2984.2	207	2990.77	259	2994.25	311		
2965.82	156	2984.38	208	2990.86	260	2994.31	312		
2966.53	157	2984.56	209	2990.94	261	2994.36	313		
2967.22	158	2984.74	210	2991.03	262	2994.41	314		
2967.87	159	2984.91	211	2991.11	263	2994.46	315		
2968.51	160	2985.08	212	2991.19	264	2994.51	316		
2969.11	161	2985.25	213	2991.27	265	2994.56	317		
2969.7	162	2985.42	214	2991.36	266	2994.6	318		
2970.27	163	2985.58	215	2991.44	267	2994.65	319		
2970.81	164	2985.74	216	2991.51	268	2994.7	320		
2971.34	165	2985.89	217	2991.59	269	2994.75	321		
2971.85	166	2986.05	218	2991.67	270	2994.8	322		
2972.34	167	2986.2	219	2991.75	271	2994.84	323		
2972.82	168	2986.35	220	2991.82	272	2994.89	324		
2973.28	169	2986.49	221	2991.9	273	2994.93	325		
2973.73	170	2986.64	222	2991.97	274	2994.98	326		
2974.16	171	2986.78	223	2992.05	275	2995.03	327		



Semi-Log plot

NonLinear 1

Company
Well Tested wellField
Test Name / #

Pressure Deconvolution

Rate 1E+7 Mscf/D
Rate change 1E+7 Mscf/D
P@dt=0 3000 psia
Pi 3000 psia
Smoothing 0.1

Selected Model

Model Option NonLinear
Well Vertical, Non Darcy Flow
Reservoir Homogeneous
Boundary Polygonal, No flow

Main Model Parameters

TMatch 2.97E-5 [hr]⁻¹
PMatch 2.76E-5 [psia]⁻¹
C 3.92E+5 bbl/psi
Total Skin -0.0668
k.h, total 789 md.ft
k, average 3.5 md
Pi 3000 psia

Model Parameters

Well & Wellbore parameters (Tested well)

C 3.92E+5 bbl/psi
Skin -0.0668

Reservoir & Boundary parameters

Pi 3000 psia
k.h 789 md.ft
k 3.5 md
Beta 0 [ft]⁻¹

Derived & Secondary Parameters

Delta P (Total Skin) -2421.23 psi
Delta P Ratio (Total Skin) -18.3885 Fraction



This document was created with the Win2PDF "print to PDF" printer available at
<http://www.win2pdf.com>

This version of Win2PDF 10 is for evaluation and non-commercial use only.

This page will not be added after purchasing Win2PDF.

<http://www.win2pdf.com/purchase/>