

Gene Bailey #12-K Kimball; NE NE SW sec. 19-T.30S.-R.16E., Wilson County, KS

SAMPLE: 565' to 566' (Lexington Coal) in canister Stegeman X

sample oven dried 2 days @ 150 degrees F

DRY WEIGHT	lbs.	grams		lbs.	grams	moisture weight	est. lost gas (cc) =		TIME OF:		elapsed time (off bottom to canistering)
sample weight:	0.0000	0	wet sample weight:	0.0000	0	#DIV/0!	21		off bottom	in canister	2.5 minutes
								10/28/02 11:46	10/28/02 11:49	0.041 hours	
CONVERSION OF VOLUMES TO STP								TIME SINCE			0.202758751 SQRT (hrs)
RIG MEASUREMENTS								TIME OF MEASUREMENT	off bottom	in canister	SQRT hrs. (since off bottom)
measured cc measured T (F measured F cubic ft (@rig) ABS. T (F) (@rig psia (@rig) cubic ft (@STP) cc (@STP cubic ft (@STP cc (@STF without lost gas								with lost gas			
DECANISTERED 10/31/02 -- VOLUMETRIC DATA ARE BAD DUE TO LEAKY CANISTER											

SAMPLE: 683.5' to 685' (Mulky Coal) in canister 3

sample oven dried 2 days @ 150 degrees F

DRY WEIGHT	lbs.	grams					est. lost gas (cc) =		TIME OF:		elapsed time (off bottom to canistering)				
sample weight:	2.3564	1068.83					100		off bottom	in canister	3.3 minutes				
								10/28/02 12:47	10/28/02 12:50	0.055 hours					
CONVERSION OF VOLUMES TO STP								TIME SINCE			0.234520788 SQRT (hrs)				
RIG MEASUREMENTS								TIME OF MEASUREMENT	off bottom	in canister	SQRT hrs. (since off bottom)				
measured cc measured T (F measured F cubic ft (@rig) ABSOLUTE T (F psia (@rig) cubic ft (@STP) cc (@STP cubic ft (@STP cc (@STF without lost gas								with lost gas							
43	80	1088	0.001518536	540	14.122	0.001404775	39.7787	0.001404775	39.7787	1.192323004	4.189717297	10/28/02 12:54	0:07:14	0:03:56	0.347211111
7	80	1088	0.000247204	540	14.122	0.000228684	6.47559	0.001633459	46.2542	1.386422097	4.383816391	10/28/02 12:55	0:07:57	0:04:39	0.364005495
24	80	1088	0.000847555	540	14.122	0.000784061	22.202	0.00241752	68.4563	2.051904704	5.049298997	10/28/02 12:57	0:10:33	0:07:15	0.419324854
7	80	1088	0.000247204	540	14.122	0.000228684	6.47559	0.002646204	74.9319	2.246003798	5.243398091	10/28/02 12:58	0:11:18	0:08:00	0.433973886
16	80	1088	0.000565037	540	14.122	0.000522707	14.8014	0.003168911	89.7332	2.689658869	5.687053162	10/28/02 13:00	0:13:18	0:10:00	0.470814896
13	80	1088	0.000459092	540	14.122	0.000424699	12.0261	0.003593611	101.759	3.050128614	6.047522907	10/28/02 13:02	0:14:48	0:11:30	0.496655481
22	80	1088	0.000776926	540	14.122	0.000718722	20.3519	0.004312333	122.111	3.660154337	6.65754863	10/28/02 13:05	0:17:48	0:14:30	0.544671155
31	80	1087	0.001094759	540	14.109	0.001011814	28.6513	0.005324147	150.762	4.51894598	7.516340274	10/28/02 13:09	0:22:33	0:19:15	0.613052472
23	80	1087	0.00081224	540	14.109	0.000750701	21.2574	0.006074848	172.02	5.156113974	8.153508267	10/28/02 13:13	0:26:18	0:23:00	0.662067469
24	80	1087	0.000847555	540	14.109	0.00078334	22.1816	0.006858187	194.202	5.820984924	8.818379217	10/28/02 13:17	0:30:33	0:27:15	0.713559154
35	80	1087	0.001236018	540	14.109	0.001142371	32.3482	0.008000558	226.55	6.790588392	9.787982686	10/28/02 13:25	0:37:48	0:34:30	0.793725393
42	80	1087	0.001483222	540	14.109	0.001370845	38.8179	0.009371403	265.368	7.954112555	10.95150685	10/28/02 13:33	0:46:18	0:43:00	0.878445597
20	80	1087	0.000706296	540	14.109	0.000652783	18.4847	0.010024186	283.852	8.50817168	11.50556597	10/28/02 13:38	0:50:58	0:47:40	0.921653104 estimate
30	80	1087	0.001059444	540	14.109	0.000979175	27.727	0.011003361	311.579	9.339260367	12.33665466	10/28/02 13:46	0:59:33	0:56:15	0.996242942
69	76	1086	0.002436721	536	14.096	0.002266822	64.189	0.013270182	375.768	11.26325767	14.26065196	10/28/02 14:05	1:18:33	1:15:15	1.144188213
61	76	1086	0.002154203	536	14.096	0.002004002	56.7468	0.015274184	432.515	12.96418282	15.96157711	10/28/02 14:29	1:41:48	1:38:30	1.302561579
47	76	1085	0.001659796	536	14.083	0.001542645	43.6827	0.016816829	476.198	14.27352493	17.27091923	10/28/02 14:49	2:02:03	1:58:45	1.426242149
47	78	1085	0.001659796	538	14.083	0.00153691	43.5203	0.01835374	519.178	15.57799961	18.5753939	10/28/02 15:17	2:30:18	2:27:00	1.582719179
80	79	1086	0.002825184	539	14.096	0.002613571	74.0078	0.02096731	593.726	17.79630523	20.79369952	10/28/02 16:02	3:15:33	3:12:15	1.805316223
50	79	1086	0.00176574	539	14.096	0.001633482	46.2549	0.022600792	639.981	19.18274624	22.18014053	10/28/02 16:42	3:55:18	3:52:00	1.980319839
46	79	1086	0.001624481	539	14.096	0.001502803	42.5545	0.024103595	682.535	20.45827197	23.45566626	10/28/02 17:29	4:42:18	4:39:00	2.169101196
34	79	1086	0.001200703	539	14.096	0.001110768	31.4533	0.025214363	713.989	21.40105185	24.39844615	10/28/02 18:01	5:13:48	5:10:30	2.286919325
56	79	1086	0.001977629	539	14.096	0.001829499	51.8055	0.027043862	765.794	22.95386579	25.95126008	10/28/02 19:26	6:39:33	6:36:15	2.58053612
108	80	1086	0.003813998	540	14.096	0.003521787	99.7255	0.030565649	865.52	25.9430326	28.9404269	10/28/02 22:18	9:31:18	9:28:00	3.085719797
181	80	1079	0.006391979	540	14.005	0.005864209	166.055	0.036429858	1031.57	30.92036439	33.91775868	10/29/02 9:45	20:57:48	20:54:30	4.578573286
106	80	1082	0.003743369	540	14.044	0.003443837	97.5182	0.039873695	1129.09	33.84337033	36.84076462	10/29/02 22:27	33:39:48	33:36:30	5.802011146
69	80	1082	0.002436721	540	14.044	0.002241743	63.4788	0.042115438	1192.57	35.74608175	38.74347604	10/30/02 13:58	49:10:48	49:07:30	7.012845357
15	80	1082	0.000529722	540	14.044	0.000487335	13.7997	0.042602773	1206.37	36.15971466	39.15710895	10/31/02 13:58	73:10:48	73:07:30	8.554530963 estimate
DECANISTERED 10/30/02 DUE TO NEED FOR CANISTER															

SAMPLE: 1065' to 1067' (Riverton Coal) in canister H

sample oven dried 2 days @ 150 degrees F

DRY WEIGHT	lbs.	grams					est. lost gas (cc) =		TIME OF:		elapsed time (off bottom to canistering)				
sample weight:	2.1460	973.4					132		off bottom	in canister	8.9 minutes				
								10/28/02 18:43	10/28/02 18:52	0.149 hours					
CONVERSION OF VOLUMES TO STP								TIME SINCE			0.385501117 SQRT (hrs)				
RIG MEASUREMENTS								TIME OF MEASUREMENT	off bottom	in canister	SQRT hrs. (since off bottom)				
measured cc measured T (F measured F cubic ft (@rig) ABSOLUTE T (F psia (@rig) cubic ft (@STP) cc (@STP cubic ft (@STP cc (@STF without lost gas								with lost gas							
5	79	1085	0.000176574	539	14.083	0.000163198	4.62123	0.000163198	4.62123	0.152096284	4.496549257	10/28/02 18:53	0:09:30	0:00:35	0.397911213
3	79	1085	0.000105944	539	14.083	9.79187E-05	2.77274	0.000261116	7.39397	0.243354054	4.587807027	10/28/02 18:53	0:10:00	0:01:05	0.40824829
2	79	1085	7.06296E-05	539	14.083	6.52791E-05	1.84849	0.000326396	9.24246	0.304192567	4.648645541	10/28/02 18:53	0:10:15	0:01:20	0.413319892
5	79	1085	0.000176574	539	14.083	0.000163198	4.62123	0.000489593	13.8637	0.456288851	4.800741824	10/28/02 18:54	0:10:45	0:01:50	0.423280837
3	79	1085	0.000105944	539	14.083	9.79187E-05	2.77274	0.000587512	16.6364	0.547546621	4.891995954	10/28/02 18:54	0:11:15	0:02:20	0.433012702
2	79	1085	7.06296E-05	539	14.083	6.52791E-05	1.84849	0.000652791	18.4849	0.608385134	4.952838108	10/28/02 18:55	0:11:40	0:02:45	0.440958552
3	79	1085	0.000105944	539	14.083	9.79187E-05	2.77274	0.00075071	21.2577	0.699642904	5.044095878	10/28/02 18:55	0:12:15	0:03:20	0.451848057

2	79	1085	7.06296E-05	539	14.083	6.52791E-05	1.84849	0.000815989	23.1061	0.760481418	5.104934391	10/28/02 18:56	0:12:30	0:03:35	0.456435465
5	79	1085	0.000176574	539	14.083	0.000163198	4.62123	0.000979187	27.7274	0.912577701	5.257030675	10/28/02 18:57	0:13:30	0:04:35	0.474341649
5	79	1085	0.000176574	539	14.083	0.000163198	4.62123	0.001142384	32.3486	1.064673985	5.409126959	10/28/02 18:57	0:14:20	0:05:25	0.48876261
3	79	1085	0.000105944	539	14.083	9.79187E-05	2.77274	0.001240303	35.1213	1.155931755	5.500384729	10/28/02 18:58	0:15:05	0:06:10	0.501386965
2	79	1085	7.06296E-05	539	14.083	6.52791E-05	1.84849	0.001305582	36.9698	1.216770269	5.561223242	10/28/02 18:59	0:15:30	0:06:35	0.508265023
5	79	1085	0.000176574	539	14.083	0.000163198	4.62123	0.00146878	41.5911	1.368866552	5.713319526	10/28/02 19:00	0:16:30	0:07:35	0.524404424
8	79	1085	0.000282518	539	14.083	0.000261116	7.39397	0.001729896	48.985	1.612220606	5.956673579	10/28/02 19:02	0:18:40	0:09:45	0.557773351
2	79	1085	7.06296E-05	539	14.083	6.52791E-05	1.84849	0.001795175	50.8335	1.673059119	6.017512093	10/28/02 19:02	0:19:20	0:10:25	0.567646212
5	79	1085	0.000176574	539	14.083	0.000163198	4.62123	0.001958373	55.4547	1.825155403	6.169608376	10/28/02 19:04	0:20:45	0:11:50	0.588075959
5	79	1085	0.000176574	539	14.083	0.000163198	4.62123	0.002121571	60.076	1.977251687	6.32170466	10/28/02 19:05	0:22:10	0:13:15	0.607819418
10	79	1085	0.000353148	539	14.083	0.000326396	9.24246	0.002447966	69.3184	2.281444254	6.625897227	10/28/02 19:08	0:25:20	0:16:25	0.64978629
15	79	1085	0.000529722	539	14.083	0.000489593	13.8637	0.00293756	83.1821	2.737733104	7.082186078	10/28/02 19:14	0:30:55	0:22:00	0.717828516
10	79	1085	0.000353148	539	14.083	0.000326396	9.24246	0.003263955	92.4246	3.041925672	7.386378645	10/28/02 19:18	0:34:50	0:25:55	0.761941963
11	79	1085	0.000388463	539	14.083	0.000359035	10.1667	0.00362299	102.591	3.376537496	7.720990469	10/28/02 19:23	0:39:30	0:30:35	0.81137743
7	79	1085	0.000247204	539	14.083	0.000228477	6.46972	0.003851467	109.061	3.589472293	7.933925266	10/28/02 19:25	0:42:00	0:33:05	0.836660027
270	80	1085	0.009534996	540	14.083	0.008796359	249.084	0.012647826	358.145	11.78746198	16.13191495	10/28/02 22:19	3:36:00	3:27:05	1.897366596
245	80	1079	0.008652126	540	14.005	0.007937742	224.771	0.020585568	582.916	19.18524168	23.52969465	10/29/02 9:47	15:03:30	14:54:35	3.88050684
99	80	1082	0.003496165	540	14.044	0.003216414	91.0783	0.023801982	673.995	22.1828599	26.52731288	10/29/02 22:29	27:45:30	27:36:35	5.268617782
63	80	1087	0.002224832	540	14.109	0.002056267	58.2268	0.025858249	732.221	24.09925018	28.44370315	10/30/02 14:02	43:18:30	43:09:35	6.580906726
40	80	1087	0.001412592	540	14.109	0.001305566	36.9694	0.027163815	769.191	25.31600591	29.66045889	10/31/02 14:02	67:18:30	67:09:35	8.204165609 estimate
10	80	1087	0.000353148	540	14.109	0.000326392	9.24235	0.027490207	778.433	25.62019484	29.96464782	11/2/02 14:02	115:18:30	115:09:35	10.73817179 estimate

DECANISTERED 10/30/02 DUE TO NEED FOR CANISTER

SAMPLE: 664' to 670' (Summit Coal) in canister Stegeman blank

sample oven dried 2 days @ 150 degrees F

DRY WEIGHT	lbs.	grams		est. lost gas (cc) =	
sample weight:	2.5363	1150.46		10	minutes

volume of free gas in cylinder (3.4 cm radius; 9.4 cm height) = 341 cm

PSI	cubic cm
1.4	32.47619048
1.45	33.63605442
0.4	9.278911565

TIME OF:		elapsed time (off bottom to canistering)
off bottom	in canister	2.0 minutes
10/28/02 12:35	10/28/02 12:37	

CONVERSION OF VOLUMES TO STP

CONVERSION OF RIG MEASUREMENTS TO STP (cubic ft; @60 deg CUMULATIVE VOLUMES SCF/TON (approx SCF/TON (approx)

measured cc	measured T (F)	measured F cubic ft (@rig)	ABSOLUTE T (F psia (@rig)	cubic ft (@STP)	cc (@STP)	cubic ft (@STP)	without lost gas	with lost gas	TIME OF MEASU	off bottom	in canister	SQRT hrs. (since off bottom)			
35	79	1085	0.001236018	539	14.083	0.001142384	32.3486	0.001142384	32.3486	0.900816766	1.179288416	10/28/02 12:56	0:21:00	0:19:00	0.591607978
36	79	1085	0.001271333	539	14.083	0.001175024	33.2728	0.002317408	65.6214	1.827371155	2.105842805	10/28/02 14:55	2:20:00	2:18:00	1.527525232
10	79	1085	0.000353148	539	14.083	0.000326396	9.24246	0.002643804	74.8639	2.084747374	2.363219024	10/30/02 14:00	49:25:00	49:23:00	7.029698903