ORIGINAL

Daily Field Report - 1
Hinthorn #CW1

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JUL 29 2002
KCC WICHITA

TICORA GEOSCIENCES, INC.
a subsidiary of GTI

Submitted To: Jim Stegeman – Colt Energy, Inc.
Submitted By: Randy Laney

Start Time / Date: 07:00 hrs 5/30/02 **Finish Date/Time:** 19:00: 5/30/02 (day rig)
Well: Hinthorn #CW1
Surface Location: SE SW Sec14 T32S R16E 100' FSL 2740' FEL Montgomery Co, Kansas
GL: 840' **KB:**

Start Depth: 130' **Finish Depth:** 320'
Total Feet Cored: 190' **% Recovered:** 100%
Formation: Kansas City Group

Core Diameter: 1.98" (NQ-2) **Drilling Fluid:** Fresh water
Head Space Fluid: field produced water

Today's Activity: TICORA personnel arrive at Hinthorn rig site at 10:30 hrs and started rig up of mobile lab. Begin routine operations at 12:30 hrs. Coring operations ceased at 18:30 hrs.

Canister headspace fluid to be used for this project was collected at the gas separator of the Hinthorn #1 well, SW/4 Sec 14 T32S R16E (several hundred yards to the north of the Hinthorn #CW1). This producing CBM well was drilled and completed in the early part of 2002 and is producing water from the Weir and Riverton seams.

TICORA received several temperature logs from near-by surrounding Colt Energy wells. Calculated gradients in the fluid filled portions of the wells were fairly consistent and ranged from 0.024 to 0.028 °F/ft. A decrease in the gradient, and even a reversal of increasing temperature with depth, near the Riverton Seam was noted in the Hinthorn #1 well (attributable to initial flowing of gas/water from seam). Water bath temperatures will range from 80 °F for the uphole Summit / Mulky samples to 90 °F for the Riverton coal.

Desorption Sample Number	Canister Number	Depth Interval		Amount of Coal in canistered interval (feet)	Seam	Calc. Sample Density [1] (gm/cc)	Bath Temperature (°F)
		Top Depth (feet)	Bottom Depth (feet)				

Coals / Comments: Several extremely small shaly coal stringers (1/4" to 1/2" thick) were encountered at a core depth of approx. 374' and 407'. Very minor visible desorption was associated with these coaly stringers. Due to the generally non-prospective nature of the bounding shales, these intervals were not canistered.

Daily Field Report - 2
Hinthorn #CW1

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GEOSCIENCES, INC.
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RECEIVED
JUL 29 2002
KCC WICHITA

Submitted To: Jim Stegeman – Colt Energy, Inc.
Submitted By: Randy Laney

Start Time / Date: 07:00 hrs 5/31/02 **Finish Date/Time:** :19:00: 5/31/02
Well: Hinthorn #CW1
Surface Location: SE SW Sec14 T32S R16E 100' FSL 2740' FEL Montgomery Co, Kansas
GL: 840' **KB:**

Start Depth: 320' **Finish Depth:** 509'
Total Feet Cored: 189' **% Recovered:** 100%
Formation: Marmaton Group

Core Diameter: 1.98" (NQ-2) **Drilling Fluid:** Fresh water
Head Space Fluid: field produced water

Today's Activity: Coring continued throughout today's report period with no rig down time .

Desorption Sample Number	Canister Number	Depth Interval		Amount of Coal in canistered interval (feet)	Seam	Calc. Sample Density [1] (gm/cc)	Bath Temperature (°F)
		Top Depth (feet)	Bottom Depth (feet)				

Coals / Comments: Several extremely small shaly coal stringers (1/4" to 1/2" thick) were encountered at a core depth of approx. 374' and 407'. Very minor visible desorption was associated with these coaly stringers. Due to the generally non-prospective nature of the bounding shales, these intervals were not canistered.

Daily Field Report – Hinthorn #CW1 Supplement

GEOSCIENCES, INC. a subsidiary of GTI

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Submitted To: Jim Stegeman – Colt Energy, Inc.
Submitted By: Randy Laney
Well: Hinthorn #CW1

Core Size: 1.98" (NQ-2)
Head Space Fluid: field produced water

		Depth	Interval							
Sample Number	Canister Number	Top Depth	Bottom Depth	Seam	Amount of **Coal** in canistered interval	Raw Sample Weight	Calc. Sample Density	cc's gas desorbed in first 60 min.	cc's gas desorbed in first 24 hrs.	B T
		(feet)	(feet)		(feet)	(grams)	(gm/cc)			(
225-1	GT-236	530.4	531.4	Mulberry	<0.1	1,442	2.41	19	103	
225-2 [3]	**3-108**	**557.3**	**558.3**	**Lexington**	**0.3**	**1,238**	**2.07**	**30**	**167**	
225-3	GT-48	660.8	661.8	Lil Osage	0.0 [2]	1,482	2.48	17	77	
225-4	GT-338	688.1	689.1	Excello	0.0 [2]	1,450	2.42	1 [4]	32	
225-5 [3]	**GT-235**	**690.2**	**691.2**	**Mulky**	**0.8**	**840**	**1.40**	**148**	**867**	
225-6	GT-126	716.6	717.6	Bevier	0.4	1,288	2.15	46	275	
225-7 [3]	**GT-240**	**717.6**	**718.6**	**Bevier**	**0.8**	**928**	**1.55**	**100**	**510**	
225-8 [3]	GT-145	741.7	742.7	Cro'burg	0.75	976	1.63	91	455	
225-9	GT-115	749.3	750.3	Fleming	0.5	1,272	2.13	44	290	
225-10	GT-239	779.2	780.2	Mineral	1.0	868	1.45	94	522	
225-11	GT-121	796.4	797.4	Scammon	0.4	1,322	2.21	47	281	
225-12	GT-310	844.0	845.0	Tebo	0.5	1,034	1.73	59	380	
225-13	GT-363	862.5	863.5	Weir	0.0 [2]	1,232	2.06	isotope	isotope	
225-14 [3]	GT-324	863.5	864.5	Weir	0.3	1,338	2.24	208	791	
225-15 [3,5]	**GT-296**	**867.7**	**868.6**	**Weir**	**0.9**	**630**	**1.17** [1]	**89**	**619**	
225-16 [3]	**GT-347**	**896.1**	**897.1**	**Lwr Weir**	**0.6**	**1,064**	**1.78**	**336**	**1,343**	
225-17	GT-101	915.3	916.3	un-named	0.4	1,202	2.01	isotope	isotope	
225-18	GT-243			un-named	0.4	896	1.49	157		

[1] Calculated Sample Density is based on a field measurement of sample weight and is figured on an intact cylinder of core 2.5" in diameter and 12" in length. When core samples are fragmented or rubblized, calculated field densities can appear low.

[2] Sample consists of carbonaceous shale.

[3] Gas samples being taken on canister to determine sorbed phase gas composition.

[4] **Original Canister GT-221** thought to have developed leak due to little or no desorbed volume. Contents transferred to GT-338 approx. 30 minutes after sealing. However after transferring to new can, it still took several hours for a measurable amount of gas to build up in canister.

Daily Field Report - 3
Hinthorn #CW1

ORIGINAL

TIGER GEOSCIENCES, INC.
a subsidiary of GTI

Submitted To: Jim Stegeman – Colt Energy, Inc.
Submitted By: Randy Laney

Start Time / Date: 07:00 hrs 6/1/02 **Finish Date/Time:** 19:00: 6/1/02
Well: Hinthorn #CW1
Surface Location: SE SW Sec14 T32S R16E 100' FSL 2740' FEL Montgomery Co, Kansas
GL: 840' **KB:**

Start Depth: 509' **Finish Depth:** 669'
Total Feet Cored: 160' **% Recovered:** 100%
Formation: Marmaton - Cherokee Groups

Core Diameter: 1.98" (NQ-2) **Drilling Fluid:** Fresh water
Head Space Fluid: field produced water

Today's Activity: Coring continued throughout today's report period with no rig down time .

Desorption Sample Number	Canister Number	Depth Interval		Amount of Coal in canistered interval (feet)	Seam	Calc. Sample Density [1] (gm/cc)	Bath Temperature (°F)
		Top Depth (feet)	Bottom Depth (feet)				
225-1	GT-236	530.4	531.4	< 0.1	Mulberry	2.41	80
225-2	3-108	557.3	558.3	0.3	Lexington	2.07	80
225-3	GT-48	660.8	661.8	0.0 [2]	Little Osage	2.48	80

[2] Sample consists of carbonaceous shale.

Coals / Comments: The **Mulberry Coal Seam** (the first canister-quality coal of the well) came in at a core depth of approx. 531.0' and consisted of several thin (1/4") coal stringers set in a carbonaceous-slightly coaly shale matrix. The coal displayed fairly close spaced cleating all delineated by calcite. The ***reservoir system**** includes the Mulberry coal and overlying carbonaceous and fossiliferous shale for a total thickness of approx. 1.6'.

Times of interest for the above sample are as follows: Mulberry Coal cut at 08:35:18 hrs. Started wirelining out of hole at 9:01:10 hrs, inner barrel at surface at 9:03:38 hrs. Canister sealed at 9:10:52 hrs. **Elapsed time** at 537' for trip out of hole to sealing of canister = **9 min. 42 sec.**

The Lexington Coal came in at a core depth of approx. 558.0' and consisted of 0.3' of shaly coal with very poor cleat development. Visible desorption was weak. **Canister 3-108** consists of the above coal along with 0.7' of overlying, somewhat carbonaceous Anna Shale. Reservoir system thickness approx. encompasses the canistered interval (1.0'). Limestone above the Lexington was observed to be bleeding a medium brown oil, especially in the interval from 554' to 556'. Additionally, a sandstone below the Lexington (Peru) was bleeding a fair amount of

similar gravity oil in the interval 574' to 584'.

The top of the Little Osage Shale came in at a core depth of 653.4' (this shale has been referred to in previous TICORA reports on coreholes in the Cherokee Basin as the Summit Interval). This shale extended to depth of 661.8' (8.4' thick). Very little of the interval was observed to be desorbing gas. **Canister GT-48** sampled the bottom 12" of the interval (which seemed to be the most prospective rock). No Summit Coal was observed. Approx. 6 feet of the overlying Higginsville Limestone had small patches of bleeding oil, mainly emanating from hairline, near vertical fractures.

***NOTE**: Estimates of *'reservoir system thickness'* given in these reports refers to the full extent of prospective (gas bearing) carbonaceous shale, coaly shale, shaly coal and coal observed when laid down in core tray. Densities generally range up to 2.1 – 2.2 gm/cc, but occasionally run to higher values (e.g., Canister GT-236 above: calculated field density = 2.41 gm/cc). Close observation for all traces of desorbing gas is made immediately after removal from core tube in order to establish the limits of the reservoir system.

Daily Field Report - 4
Hinthorn #CW1

TRIDENT GEOSCIENCES, INC.
a subsidiary of GTI

Submitted To: Jim Stegeman – Colt Energy, Inc.
Submitted By: Randy Laney

Start Time / Date: 07:00 hrs 6/2/02 **Finish Date/Time:** 19:00 6/2/02
Well: Hinthorn #CW1
Surface Location: SE SW Sec14 T32S R16E 100' FSL 2740' FEL Montgomery Co, Kansas
GL: **KB:**

Start Depth: 669' **Finish Depth:** 841'
Total Feet Cored: 172' **% Recovered:** 100%
Formation: Cherokee Group

Core Diameter: 1.98" (NQ-2) **Drilling Fluid:** Fresh water w/ ~1% KCl
Head Space Fluid: field produced water

Today's Activity: Coring continued throughout today's report period with no rig down time .

Desorption Sample Number	Canister Number	Depth Interval Top Depth (feet)	Depth Interval Bottom Depth (feet)	Amount of Coal in canistered interval (feet)	Seam	Calc. Sample Density [1] (gm/cc)	Bath Temperature (°F)
225-4	GT-338 [4]	688.1	689.1	0.0 [2]	Excello	2.42	80
225-5	**GT-235**	**690.2**	**691.2**	**0.8**	**Mulky**	**1.40**	**80**
225-6	GT-126	716.6	717.6	0.4	Bevier	2.15	80
225-7	**GT-240**	**717.6**	**718.6**	**0.8**	**Bevier**	**1.55**	**80**
225-8	GT-145	741.7	742.7	0.75	Cro'burg	1.63	80
225-9	GT-115	749.3	750.3	0.5	Fleming	2.13	80
225-10	GT-239	779.2	780.2	1.0	Mineral	1.45	80
225-11	GT-121	796.4	797.4	0.4	Scammon	2.21	80

[4] **Original Canister GT-221 thought to have developed leak due to little or no desorbed volume. Contents transferred to GT-338 approx. 30 minutes after sealing. However after transferring to new can, it still took several hours for a measurable amount of gas to build up in canister.**

Coals / Comments: The top of the **Excello Shale** came in at a core depth of 683.9' and extended to 690.4' (thickness = 6.5'). However, the interval was splayed by non-carbonaceous limy shale near the top. Additionally, only the carbonaceous shale near the base of the unit could be seen desorbing traces of gas. Gas was emanating from hairline, near vertical fractures, and extremely weakly from horizontal partings in the shale. **Canister GT- 338** (originally GT-221- see note above) contains 12" of carbonaceous shale. Colt Energy / KGS sampled the Excello from 687.1' – 688.1'.

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The underlying **Mulky Coal** came in at a core depth 690.4' – 691.2' (0.8'). The Mulky coal had some cleat development (with calcite in cleats) and fair visible desorption. **Canister GT-235** contains the entire Mulky Coal interval and 0.2' of overlying carbonaceous shale. Colt Energy / KGS sampled approx. 0.6' of shale immediately above the shale that went into Canister GT-235. **Times of interest** for the Mulky coal: cut at 7:58:15 hrs. Begin wireline out of hole at a depth of 699' at 8:21:47 hrs. Inner barrel at surface at 8:24:10 hrs. Sample sealed in canister at 8:30:55. Elapsed time from start of trip to can seal = **9 min 8 sec**.

The **Bevier Coal** came in at a core depth of 717.2' to 718.4'. The coal was split by the end of a core run. **Canister GT-126** contains 0.4' of coal and 0.6' of overlying pyritic shale and carbonaceous shale. The top of the next core run contained the remainder of the Bevier seam. **Canister GT-240** contains 0.8' of coal and 0.2' of underlying medium grey non-carbonaceous shale. The coal sample was competent but displayed fair cleating (1/4" to 3/8" spacing) delineated by calcite. Visible desorption before canistering was fair. Reservoir system thickness is approx. 2.0' thick (716.4' – 718.4').

The **Croweburg Coal** seam was encountered at a core depth of 741.9' – 742.7'. Reservoir system thickness is estimated to be approx. 2.5' thick (740.2' – 742.7') based on visibly desorbing gas from the overlying carbonaceous shale. **Canister GT-145** contains all of the Croweburg Coal and 0.2' of overlying carb shale. This coal displayed fair, calcite-filled cleating and moderate visible desorption activity.

The **Fleming Coal** came in at a core depth of 749.8' – 750.5' (0.7' thick). Limited intervals of carbonaceous shale above this coal were also observed to be weakly desorbing gas. The Fleming coal displayed 1/4" spacing of face cleats (all calcite filled) and also a rather thick (1/2") pyritic band near the top. **Canister GT-115** contains the bulk (0.5') of this coal seam (split by a core run) and 0.5' of overlying dark grey shale and carbonaceous shale.

The **Mineral Coal Seam** was encountered at a core depth of 779.0' to 780.2' (1.2' thick). **Canister GT-239** contains 1.0' of this coal. Pyritic bands were observed at the top and bottom of this seam. Colt Energy / KGS sampled approx. 0.2' of coal and 0.8' of overlying carbonaceous shale. The reservoir system thickness encompasses the two sampled feet and about 0.2' of underlying carb shale 778.2 – 780.4').

A thin **Scammon Coal** was cored from 796.7' to 797.1'. Canister GT-121 contains all of the coal (0.4') along with 0.3' of overlying, slightly carbonaceous shale and 0.3' of underlying slightly coaly sandstone (root zone). Visible desorption before canistering was weak.

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Daily Field Report - 5
Hinthorn #CW1

TRIGON GEOSCIENCES, INC.
a subsidiary of GTI

RECEIVED
JUL 29 2002
KCC WICHITA

Submitted To: Jim Stegeman – Colt Energy, Inc.
Submitted By: Randy Laney

Start Time / Date: 07:00 hrs 6/3/02 **Finish Time / Date:** 19:00: 6/3/02
Well: Hinthorn #CW1
Surface Location: SE SW Sec14 T32S R16E 100' FSL 2740' FEL Montgomery Co, Kansas
GL: 840' **KB:**

Start Depth: 841' **Finish Depth:** 959'
Total Feet Cored: 118' **% Recovered:** 100%
Formation: Cherokee Group

Core Diameter: 1.98" (NQ-2) **Drilling Fluid:** Fresh water w/ ~1% KCl
Head Space Fluid: field produced water

Today's Activity: Coring continued throughout most of today's report period. Rig was down for approx. 1 hr for repairs to engine throttle.

Desorption Sample Number	Canister Number	Depth Interval Top Depth (feet)	Depth Interval Bottom Depth (feet)	Amount of Coal in canistered interval (feet)	Seam	Calc. Sample Density [1] (gm/cc)	Bath Temperature (°F)
225-12	GT-310	844.0	845.0	0.5	Tebo	1.73	85
225-13	GT-363	862.5	863.5	0.0 [2]	Weir	2.06	85
225-14	GT-324	863.5	864.5	0.3	Weir	2.24	85
225-15	**GT-296**	**867.7**	**868.6**	**0.9**	**Weir**	**1.17** [1]	**85**
225-16	**GT-347**	**896.1**	**897.1**	**0.6**	**Lwr Weir**	**1.78**	**85**
225-17	GT-101	915.3	916.3	0.4	un-named	2.01	85

[1] Calculated Sample Density is based on a field measurement of sample weight and is figured on an intact cylinder of core 1.98" in diameter and 12" in length. When core samples are fragmented or rubblized, calculated field densities can appear low.

[2] Sample consists of carbonaceous shale.

Coals / Comments: The Tebo Coal Seam came in at a core depth of 844.4' – 844.9'. Cleating was evident (delineated by calcite fill) and the coal appeared to contain some evidence of hydrocarbon liquid. Wet surface had a slight iridescence and faint odor. Visible desorption was weak. **Canister GT-310** contains all of the Tebo coal and some bounding carbonaceous shale. Reservoir system thickness includes bounding carbonaceous shales and extends from 841.4' to 845.0' (3.6' thick).

The Weir coal seam came in at a core depth of 864.2' to 868.6' (4.4' thick). The entire reservoir system thickness is estimated to be 6.9 ft. thick (861.7' – 868.6').

The Weir came in unexpectedly high with the very top occurring at the bottom of a core run. **Canister GT-363** contains 12" of overlying bounding carbonaceous shale and was taken for later isotopic analysis. **Canister GT-324** contains approx. 0.3' of Weir coal, 0.3' of coaly shale and 0.4' of lighter grey shaly / coaly sand with some soft grey claystone. This sample was at the very bottom of the barrel.

On the subsequent coring run, the bulk of the Weir Coal was cut (864.5' – 868.6' – from 09:03 to 09:07 hrs). Pump pressure was erratic during the run, reaching 600 psi (normal = 110 – 130 psi) indicating friable coal was jamming in barrel. Two feet of underclay was cored and the run halted. The inner barrel was tripped but recovery consisted of only 0.2' of Weir coal (sample canistered by Colt / KGS)

Another wireline trip was attempted to retrieve the slipped core, but was unsuccessful. The inner barrel was dropped a third time, rods kellyed up, and two additional feet were cut. Inner barrel was wirelined to surface and contained approx. 0.9' of rubbly basal Weir Coal and 2.7 ft of underclay. **Canister GT-296** contains only a 0.9' length sample, all of the basal Weir Coal. **The coal interval from 864.7' – 867.7' was lost (3.0').**

The core reached surface at 10:23 hrs and Canister GT-296 was sealed at 10:30 hrs. For the time period between cutting the bulk of the Weir coal and ultimate retrieval of the sample in canister GT-296 (1 hr 20 minutes), the coal was exposed to variable and reduced hydrostatic pressures. This was due to the amount of water swabbed out of the hole when tripping inner barrel. It is estimated that the fluid level in pipe fell to about 400-500 ft below the surface for at least 20 minutes. During this time period, this sample was probably desorbing some gas. Gas streaming and bubbling into hole from the Weir seam (?) could be heard near wellhead when pipe was not full of fluid. As a result, some degree of uncertainty will exist for the lost gas value derived for Canister GT-296.

A Lower Weir Seam was encountered at a core depth of approx. 895.4' to 896.9' (about 1.5' thick) and consisted of coal and shaly coal. The entire reservoir system thickness is about 2.6' thick (894.6' – 897.2'). Visible desorption was moderately vigorous. **Canister GT-347** contains 0.6' of coal and 0.4' coaly shale from this seam. Colt Energy / KGS sampled 12" of overlying coal and shaly coal from 895.1' – 896.1'. **Times of interest for this run:** start of wireline trip out of hole: 12:41:38 hrs, barrel at surface at 12:45:56 hrs, canister sealed at 12:52:58 hrs. Elapsed time for start of trip to can seal = **11 min 20 secs.**

An un-named seam came in at a core depth of 915.9' to 916.3' and consisted of very rubbly coal (good cleat development). This coal was sampled along with 0.6' of overlying carbonaceous shale and will be used for later isotopic analysis **(GT-101).**