

### **Corporation Commission**

### Abandoned Oil & Gas Well Status Report

Joint Committee on Energy and Environmental Policy

Doug Louis, Conservation Division Director September 9, 2011



Early 20th Century Oil Field, Kansas

There are two funds for the KCC to use for abandoned well plugging.

- Abandon Well/Site Remediation Fund- used to plug wells drilled before 1996, and site remediation.
- Well Assurance Fund- used to plug well wells drilled after 1996.

### Abandoned Well / Site Remediation Fund

- Created with the passage of K.S.A. 55-192 and K.S.A. 55-193 in 1996.
- Purpose is to provide significant funding to plug abandoned oil and gas wells and to investigate, monitor, and remediate oil & gas contamination sites.
- Fund's sunset date extended to June 30, 2016.

### **Abandoned Well / Site Remediation Fund Funding Sources**

### Four statutory funding sources established 7/1/1996:

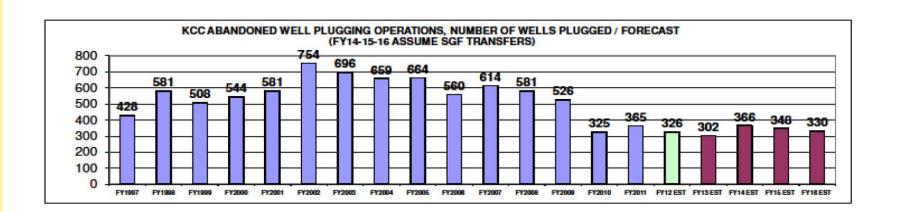
- Increased assessments on crude oil and natural gas production through the conservation fee fund
- General fund monies
- State water plan monies
- 50% of monies received by the state through the federal mineral leasing program

Total funding package averages \$1,600,000 per year.

### ANNUAL FUNDING SOURCES AND WELL PLUGGING TOTALS

#### KCC ABANDONED WELL PLUGGING / SITE REMEDIATION FORECAST

NO SGF TRANSFER FOR FY	SCF TRANSFER FOR FY 00-04-05-08-07-08-09-10-11-12-13; NO SWP FY03-04; PROJECTION SCENARIO 1				CLEREAU PROGRAM SUMSET IS JUNE 30, 2016 (END OF FYSHIS,			ACTUAL / PROJECTED WELL PLUGGING BY FISCAL YEAR									
	FY2004	F12005	FY2006	FY200 EST	F10000	F17009	F10010	FY2011 TO	FEMOLOGIST	FY2013EST	FY2014EST	FYZOISEST	FEMOREST		AW TOTALS	# PLUGGED	AV G WEI
ST. LUSED FROM 2HG CASH BAL"	\$7 12,309	90	\$0	\$222,589	\$201,054	\$0	\$50,750	90	90	90	\$0	90	90	FY198	\$1,732,796	400	\$4,04
STATE GENERAL FUND	\$0	\$10	80	90		90	\$0	90	90	90	\$400,000	\$400,000	\$400,000	FY1000	\$1,594,272	581	\$2,72
STATE WATER PLAN	50	\$867,000	\$400,000	\$400,000	\$400,000	\$330,000	\$290,000	\$374,965	\$400,000	\$384,000	\$400,000	\$400,000	\$400,000	FY1200	\$1,259,744	500	\$2,49
102 FEDERAL LEASE MINERAL	\$700,572	9371,391	\$1,242,010	\$892,790	\$1,100,000	\$1,085,117	\$867,096	\$859,093	\$541,911	\$825,073	\$800,571	\$792,400	\$776,552	FY2000	\$1,586,721	544	\$2,00
DOMESTIVATION FEE FUND 2130	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	\$400,000	FY2001	\$1,963,469	581	\$2,37
CFF 2430 ADDIL TRANSFER*	\$430,000	\$295,000	\$310,000	\$400,000	\$400,000	\$400,000	90	90	60	90	\$10	\$0	90	EA3000	\$1,796,320	754	\$2,30
LEASE SALVAGE	\$21,333	\$24,219	\$92,045	\$45,031	\$10,091	\$14,446	\$25,003	\$7,239	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	FY9003	\$2,192,210	696	\$9,15
WIEREST	\$25,051	\$34,747	\$60,125	\$95,950	\$92,929	980,539	\$15,000	\$5,793	\$6,500	99,500	\$40,500	\$8,500	\$9,500	FY2004	\$1,985,075	659	\$5,01
MISC. & RECOVERES	\$295	\$500	\$4,001	96,201	\$2,365	\$22,247	9949	\$3,291	\$2,500	82,500	\$2,500	\$2,500	\$2,500	FY2005	\$2,224,291	004	\$9,35
TOTAL AVAILABLE	\$2,353,540	\$2,392,960	\$2,457,079	\$2,473,261	\$2,075,437	\$0,300,400	\$1,449,400	\$1,550,291	\$1,857,911	\$1,805,073	\$2,024,571	\$2,000,400	\$1,960,552	FY2006	\$2,001,552	580	\$2,50
LESS REMEDIATION "	\$200,373	\$89,012	\$51,905	\$55,281	\$4,976	\$6,321	\$57,029	\$13,406	\$20,000	\$20,000	\$10,000	\$10,000	\$10,000	FY300	\$2,494,229	814	\$4,08
ARDN WELL PLUGGING \$	\$1,505,567	\$2,304,349	\$2,405,094	\$2,419,000	\$2,989,581	\$2,374,000	\$1,392,451	\$1,842,795	\$1,027,911	\$1,585,073	\$2,014,571	\$1,999,400	\$1,960,552	FY2008	\$2,969,561	581	\$4,22
														E43000	\$2,077,700	506	\$2,25
IND-0140 LINENC CASH BAL***	\$104,016	\$63,795	\$493,725	\$383,814	\$446,343	\$340,714	\$220,005	\$334,050						FY2010	\$1,302,451	305	\$4,25
									\$204,050					FY3011	\$1,542,795	365	\$4,50
ADDITIONAL TRANSFERS MADE TO	DOMPENBATE P	OR LOSS OF SQ	FA SWP						G3000011					FYIREST	\$1,027,911	108	\$5,00
"SITE REMEDIATION ACTIVITY								FYIREST	\$1,505,073	302	\$5,25						
*** 2145 CASH BALANCE FROM STARS / SMART , DOES NOT CORRELATE TO THE ABOVE DATA IN PROJECT TRACKING FORMAT.									FY14 EST	\$2,014,571	300	\$5,50					
PLUGGING ESTIMATES FOR FFIA, FYIA, FYHEASIS, ME RESUMPTION OF SGF-\$400,000 TRANSFERSI TO FUND.									<b>FYISEST</b>	\$1,000,400	340	\$5,75					
									THAT THE	#4 mm ###		-					



9127511

\$3,707

EST. TOTAL \$38,069,941

## Abandoned Well / Site Remediation Fund Status of the Abandoned Well Inventory

### **Historical Activity**

- 8,200 wells plugged since July 1, 1996
- 3,500 wells investigated, no longer requiring action for other reasons

### **Current Activity**

- 5,475 wells having no responsible party which require plugging
- 209 wells having no responsible party added in FY2011
- 326 wells will be plugged with available FY2012 funding

### KANSAS CORPORATION COMMISSION ABANDONED WELL PLUGGING FUND WELLS PLUGGED FROM 7/1/1996 TO DATE

### KCC DISTRICT 1, DODGE CITY

PRIORITY	GW	SW	PS	TOTAL
1-A	22			22
1-B	17			17
1-C	32			32
2	6			6
TOTAL	77	0	0	77

### KCC DISTRICT 2, WICHITA

PRIORITY	GW	SW	PS	TOTAL
1-A	79	32	41	152
1-B	22	1	2	25
1-C	4			4
2			2	2
TOTAL	105	33	45	183

### KCC DISTRICT 3, CHANUTE

PRIORITY	GW	SW	PS	TOTAL
1-A	1602	583	159	2344
1-B	2853	1361	56	4270
1-C	321	539	1	861
2	29	42		71
TOTAL	4805	2525	216	7546

### KCC DISTRICT 4, HAYS

PRIORITY	GW	SW	PS	TOTAL
1-A	179	14	6	199
1-B	179		3	182
1-C	10			10
2				0
TOTAL	368	14	9	391

#### KCC DIVISION TOTALS

	COO DITION				
PRIORITY	GW	SW	PS	TOTAL	%
1-A	1882	629	206	2717	33%
1-B	3071	1362	61	4494	55%
1-C	367	539	1	907	11%
2		7-3-1-3		79	1%
TOTAL	5320	2530	268	8197	
%	65%	31%	3%		

### **Abandoned Exploration & Production Wells**

### **Priority Ranking (Priority I)**

- Level A Surface Water (SW) Wells actively discharging oil or brine into surface waters
- Level A Groundwater (GW) Wells creating significant ongoing or potential impacts to groundwater supplies through water quality degradation or loss of water supplies through downward drainage
- Level A Public Safety (PS) Wells creating a threat to public safety (active gas flows or open large diameter wellbores or in urban or suburban settings)

### **Priority Ranking (Priority I)**

- Level B Surface Water (SW) Wells intermittently to actively discharging oil or brine into surface waters
- Level B Groundwater (GW) Wells creating ongoing or potential impacts to groundwater supplies through water quality degradation or loss of water supplies through downward drainage
- Level B Public Safety (PS) Wells creating a current or ongoing threat or potential danger to public safety (active gas flows or open large diameter wellbores in rural, low population areas)

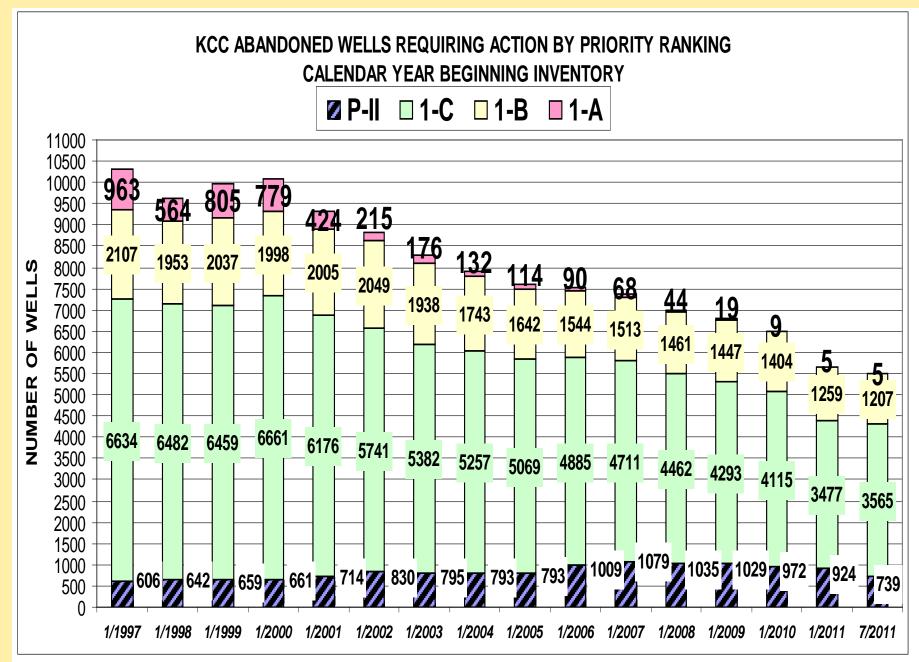
### **Abandoned Exploration & Production Wells**

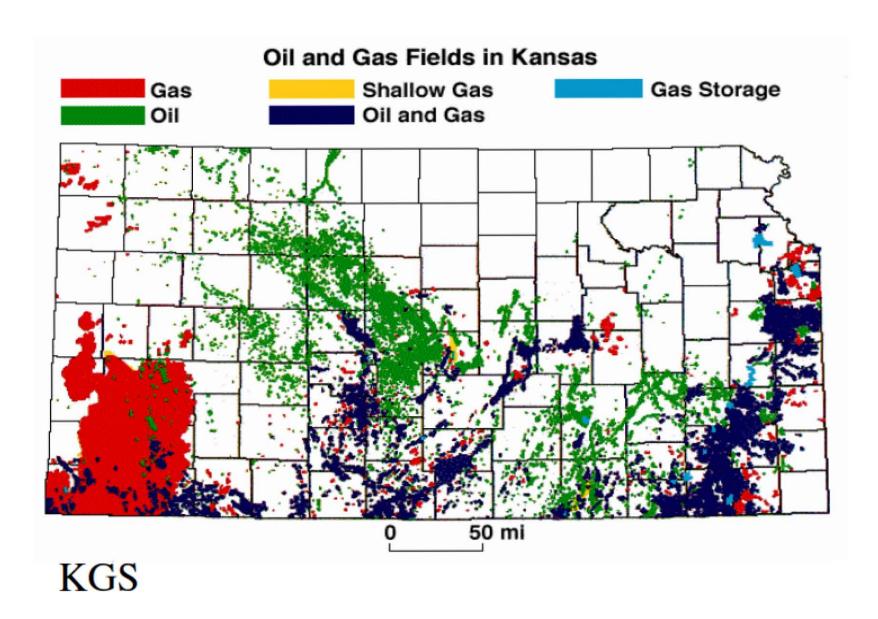
### **Priority Ranking (Priority I)**

- Level C Surface Water (SW) Wells located outside of sensitive groundwater areas, which are intermittently discharging oil and/or brine or have potential for discharge into surface waters.
- Level C Groundwater (GW) Wells located outside of sensitive groundwater areas which have potential impacts to groundwater supplies or loss of water resources through downward drainage
- Level C Public Safety (PS) Wells creating a potential danger to public safety (Includes secured gas wells in populated areas)

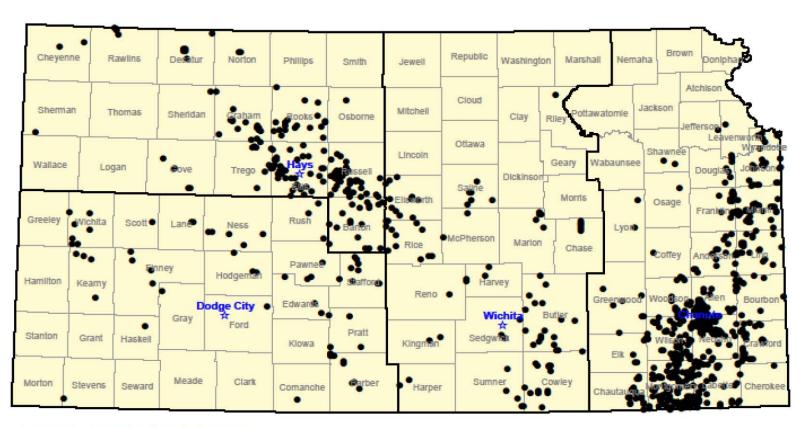
### **Priority Ranking (Priority II)**

• Wells of relatively modern construction, which do not pose either an ongoing or potential threat to the public safety or the environment. These wells have adequate surface pipe in place to protect shallow freshwater aquifers and are generally located in environmentally non-sensitive areas. These wells fall within the lowest priority ranking for authorization of plugging with Abandoned Oil and Gas Well / Remediation Fund monies. It is important these wells be documented within the inventory and periodically inspected to determine if well conditions have changed to a sufficient degree to warrant upgrading to Priority I status.



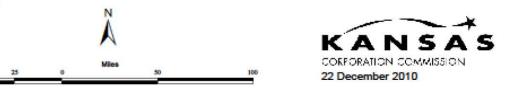


### Statewide Distribution of State Funded Abandoned Wells Since 1996



- Location of an abandoned oil and gas well or group of wells plugged since inception of the plugging program in 1996
- ★ District Field Offices
- Conservation Districts

County



# ABANDONED WELL LEAKING OIL & SALTWATER IN VERDIGRIS RIVER FLOODPLAIN, MONTGOMERY CO.



### ABANDONED WELL LEAKING OIL, 65-WELL PLUGGING PROJECT, NEOSHO CO.





### ABANDONED WELL DRILLED IN 1926

VENTING GAS AND FLOWING SALTWATER

KINGMAN CO.

### ABANDONED WELL FLOWING SALTWATER, LABETTE CO.



## ABANDONED WELL VENTING GAS AT RESIDENCE IN COFFEYVILLE, KS





# ABANDONED WELL DRILLED IN 1923. 6' DIAMETER AT SURFACE TAPERS TO 13" DIA. 2800' DEEP EASTERN BUTLER CO.





### BURIED ABANDONED WELL IN SCHOOL YARD LOST SPRINGS, MARION CO.





# ABANDONED WELL BELOW SURFACE LEAKING GAS & SALTWATER CHANUTE NEOSHO CO.





### ABANDONED GAS WELL FOUND UNDER HOUSE FOUNDATION, NEODESHA, KS







### ABANDONED WELL VENTING GAS AT RESIDENCE IN LEAWOOD JOHNSON CO.







# ABANDONED WELL PLUGGING IN NEW HOUSING DEVELOPMENT, NORTHEAST WICHITA, SEDGWICK CO.

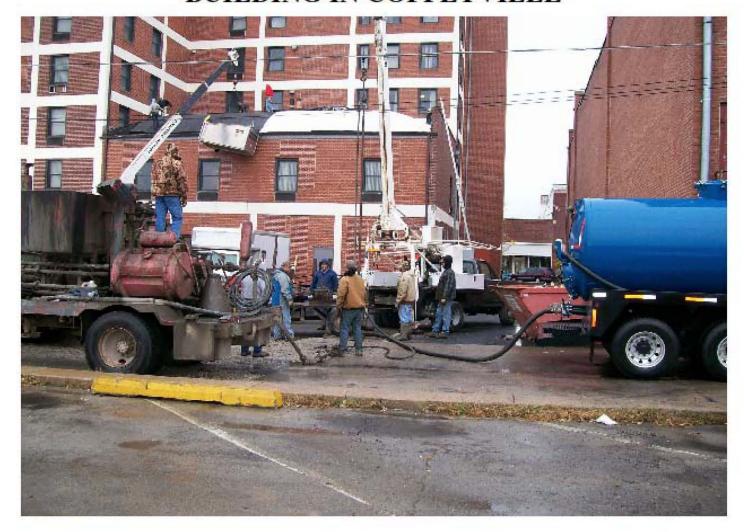




# ABANDONED WELL PLUGGING AT APARTMENT COMPLEX, EAST SALINA, SALINE CO.



### PLUGGING ABDN. WELL BEHIND APARTMENT BUILDING IN COFFEYVILLE



### Well Plugging Assurance Fund

 Specific fund for the KCC to plug wells drilled & abandoned after 1996

- Financial Assurance is paid by oil & gas operators licensing fees
- Authority K.A.R. 55-155

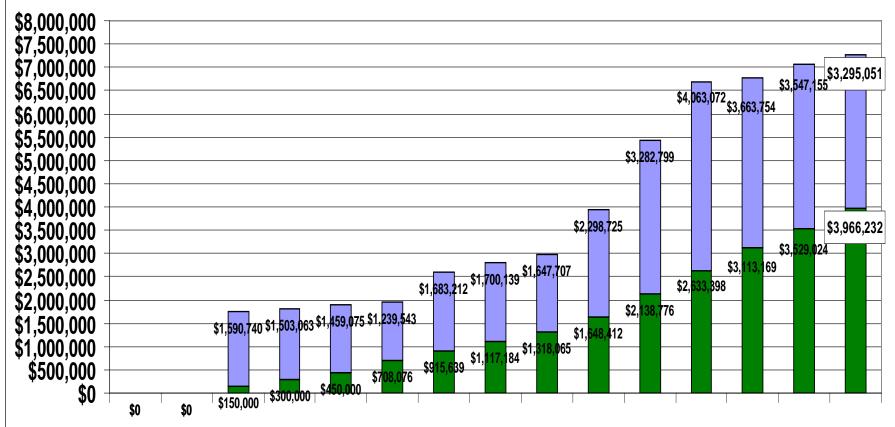
### 2010 Contributions to Well Plugging Assurance Fund

Method of <u>Assurance</u>	Number of <u>Licenses</u>	Revenue	Assurance
\$100 Fee	1,627	\$162,700	\$162,700
Cash Bond To KCC	192	\$223,300	\$223,300
Surety Bond	27		\$927,183
CD / Letter of Credit	121		\$2,367,868

### WELL PLUGGING ASSURANCE FUND BALANCES

■ ASSURANCE FUND CASH BALANCE

■ NET NON-CASH ASSURANCE



1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

### **Considerations / Actions**

The Abandoned Well Plugging Fund was scheduled to sunset on 6-30-2009, with an estimated 6,600 wells still requiring action. The 2008 Legislature amended K.S.A. 55-193 to extend this Fund seven more years to 6-30-2016.

To maintain abandoned well plugging and site remediation activities at meaningful levels, the KCC requests the statutory transfers (SGF and SWP) be re-instated.

The KCC did increase the CFF transfer for six fiscal years. These additional increases were discontinued due to budget reductions, cash fund sweeps and complaints from industry.

Inflationary pressures and competition will cause wellplugging costs to increase, which in-turn reduces the number of wells plugged annually.

### **Considerations / Actions**

The KCC will continue to increase emphasis on enforcement programs to properly identify operators who are responsible for abandoned wells. Programs such as accurate producing-well inventories, enforcement of the 10-year temporary abandonment regulation, and requiring accurate GPS locations on wells will be implemented as ways of tying operators to specific wells over time.

The KCC will continue its commitment to work with industry, water-related and landowner groups (through the Oil and Gas Advisory Committee) to develop regulation and policy related to abandoned well responsibility and financial assurance consistent with recent Commission rulings concerning abandoned wells under K.S.A. 55-179.

## KCC-Conservation Division http://kcc.ks.gov

### Doug Louis, Director

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