

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

Operator: License # 3180  
Name: Deutsch Oil Company  
Address 8100 E. 22nd St. North  
Building 600 Suite D  
City/State/Zip Wichita, Kansas 67226  
Purchaser: Kansas Gas Supply  
Operator Contact Person: Kent Deutsch  
Phone (316) 681-3567  
Contractor: Name: Mallard JV Inc.  
License: 4958  
Wellsite Geologist: Kent Deutsch

Designate Type of Completion  
 New Well  Re-Entry  Workover  
 Oil  SWD  SIOW  Temp. Abd.  
 Gas  ENHR  SIGW  
 Dry  Other (Core, WSW, Expl., Cathodic, etc)

If Workover:  
Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Comp. Date \_\_\_\_\_ Old Total Depth \_\_\_\_\_  
 Deepening  Re-perf.  Conv. to Inj/SWD  
 Plug Back  PBTB  
 Commingled  Docket No. \_\_\_\_\_  
 Dual Completion  Docket No. \_\_\_\_\_  
 Other (SWD or Inj?)  Docket No. \_\_\_\_\_  
10-04-97 \_\_\_\_\_ 10-11-97 \_\_\_\_\_ 01-13-98 \_\_\_\_\_  
Spud Date \_\_\_\_\_ Date Reached TD \_\_\_\_\_ Completion Date \_\_\_\_\_

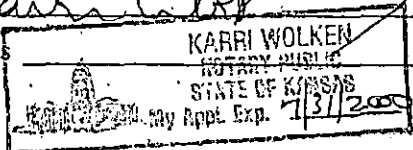
API NO. 15- 145-214490000  
County Pawnee  
S/2- NW - SW Sec. 22 Twp. 23 Rge. 16  W  
1650 Feet from S/N (circle one) Line of Section  
660 Feet from E/W (circle one) Line of Section  
Footages Calculated from Nearest Outside Section Corner:  
NE, SE, NW or SW (circle one)  
Lease Name Hays Well # 1-22  
Field Name Zook  
Producing Formation Arbuckle  
Elevation: Ground 2052' KB 2057'  
Total Depth 4100' PBTB  
Amount of Surface Pipe Set and Cemented at 250 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from \_\_\_\_\_  
feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan AH-1 12-11-98 U.C.  
(Data must be collected from the Reserve Pit)  
Chloride content 70000 ppm Fluid volume 320 bbls  
Dewatering method used Vac. Truck  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name DU Investents  
Lease Name Shoemake SWD License No. 30690  
NW Quarter Sec. 20 Twp. 23 S Rng. 17W E/W  
County Pawnee Docket No. D-24,054

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature [Signature]  
Title Owner Date 01-23-98  
Subscribed and sworn to before me this 23rd day of January  
19 98  
Notary Public [Signature]  
Date Commission Expires \_\_\_\_\_



K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Geologist Report Received  
Distribution  
 KCC  SWD/Rep  NGPA  
 KGS  Plug  Other  
(Specify)

NOV 2

Form ACO-1 (7-91)

CONSERVATION DIVISION 11-24-98  
WICHITA, KS

ORIGINAL

SIDE TWO

Operator Name Deutsch Oil Company Lease Name \_\_\_\_\_ Hays \_\_\_\_\_ Well # 1-22

Sec. 22 Twp. 23 Rge. 16  East County Pawnee

West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken  Yes  No  
(Attach Additional Sheets.)

Samples Sent to Geological Survey  Yes  No

Cores Taken  Yes  No

Electric Log Run  Yes  No  
(Submit Copy.)

List All E.Logs Run:  
Dual Induction  
Compensated Neutron/Density

Name	Formation (Top), Depth and Datum		Datum
	Top	Depth	
Winfield	2086	-29	
Heebner	3514	-1457	
Brown Lime	3633	-1576	
Lansing	3642	-1585	
Base K.C.	3905	-1848	
Arbuckle	4045	-1988	

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (in O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	10 3/4"	8 5/8"	20#	250'	60/40 poz	200	2% gel 3% cc.
Production	7 7/8"	5 1/2"	14.0#	4098'	ASC	125	5# Ko1seal

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input checked="" type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	2689	60/40 poz	200	2% gel 10% salt
	<i>Port Collar</i>			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type	Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used)	Depth
4	4046-4049		

TUBING RECORD		Size	Set At	Packer At	Liner Run
		2 3/8"	4044'	none	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj.	Producing Method
01-14-98	<input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	400	0		

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION:  Open Hole  Perf.  Dually Comp.  Commingled 4046-4049

Production Interval:  Other (Specify) \_\_\_\_\_

# ALLIED CEMENTING CO., INC. ORIGINAL 5767

BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
*Cheat Bend, Mo*

DATE <b>10-4-97</b>	SEC. <b>27</b>	TWP. <b>23</b>	RANGE <b>16 W</b>	CALLER'S NAME	CALL TIME <b>5:30 PM</b>	ON LOCATION <b>7:00 PM</b>	JOB START <b>9:15</b>	JOB FINISH <b>9:45</b>
LEASE <b>4 yrs</b>	WELL # <b>1-22</b>	LOCATION <b>Rock, 1/2 S 1-E 1/2 S E-into</b>		COUNTY <b>Pawnee</b>	STATE <b>KA</b>			
OLD OR (NEW) (Circle one)								
CONTRACTOR <b>Mallard Drilling Co.</b>					OWNER <b>Same</b>			
TYPE OF JOB <b>Surface casing</b>								
HOLE SIZE <b>8 5/8"</b>			DEPTH <b>250'</b>			CEMENT AMOUNT ORDERED <b>200 CY 60/40% poz 3% CC 2% gel</b>		
TUBING SIZE			DEPTH					
DRILL PIPE			DEPTH			<b>(used all)</b>		
TOOL JOINT DEPTH			PRES. MAX			MINIMUM		
MEAS. LINE			SHOE JOINT			COMMON		
CEMENT LEFT IN CSG			GEL			CHLORIDE		
PERFS.			HANDLING			MILEAGE		
PUMP TRUCK # <b>120</b>			CEMENTER <b>Duane Smith</b>			HELPER <b>Kerrin Rose</b>		
BULK TRUCK # <b>342</b>			DRIVER <b>Kerry Rose</b>			TOTAL <b>\$1708.50</b>		

REMARKS:		SERVICE	
<b>Ran (6) joints 24" 8 5/8" casing</b>		DEPTH OF JOB <b>250'</b>	
<b>Circulated hole @ rig pump</b>		PUMP TRUCK CHARGE <b>470.00</b>	
<b>Pumped 200 CY 60/40% poz 3% CC 2% gel</b>		EXTRA FOOTAGE @	
<b>Released plug &amp; displaced @ 15 Bbls @ 20'</b>		MILEAGE <b>.35 @ 2.70 99.75</b>	
<b>Cement did circulate</b>		PLUG (2 Cipe wooden) 8 5/8" @ <b>45.00 45.00</b>	
		TOTAL <b>\$614.75</b>	

CHARGE TO: **Deutch Oil Co.**  
STREET **107 N. Market 115 Bitting Bldg.**  
CITY **Wichita** STATE **Ks.** ZIP **67202**

RECEIVED		FLOAT EQUIPMENT	
KANSAS CORPORATION COMMISSION		TOTAL	
NOV 24 1998		TAX <b>-0-</b>	
CONSERVATION DIVISION WICHITA, KS		TOTAL CHARGE <b>\$ 2323.25</b>	
		DISCOUNT <b>\$ 348.49</b> IF PAID IN 30 DAYS	

To Allied Cementing Co., Inc.  
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

Net \$ 1974.76

SIGNATURE *[Signature]*

# ALLIED CEMENTING CO., INC. ORIGINAL 3179

REMIT TO: P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT: Neosho City

DATE: <u>10-12-97</u>	SEC. <u>22</u>	TWP. <u>23</u>	RANGE <u>16</u>	CALLED OUT <u>7:00pm</u>	ON LOCATION <u>10:45pm</u>	JOB START <u>5:30am</u>	JOB FINISH <u>7:20am</u>
LEASE <u>Days</u>	WELL# <u>1-22</u>	LOCATION <u>ZOOK 2S 1E 1/2 W E S</u>	COUNTY <u>Pawnee</u>	STATE <u>KS</u>			

OLD OR NEW (Circle one)

CONTRACTOR Mallard Oils

TYPE OF JOB 5 1/2 Production

HOLE SIZE 7 7/8 T.D. 4100

CASING SIZE 5 1/2 DEPTH 4098

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_

TOOL Port collar DEPTH 2689

PRES. MAX 1200 MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT 10'35"

CEMENT LEFT IN CSG. 10'35"

PERFS \_\_\_\_\_

OWNER \_\_\_\_\_

CEMENT

AMOUNT ORDERED 500gal ASF

150 sx ASC. 5" Kol Seal per sk

**EQUIPMENT**

PUMP TRUCK # 224 CEMENTER J. W. Whelan

BULK TRUCK # 311 DRIVER B. Whelan

BULK TRUCK # \_\_\_\_\_ DRIVER \_\_\_\_\_

COMMON	@	_____
POZMIX	@	_____
GEL	@	_____
CHLORIDE	@	_____
<u>ASF 500gal</u>	@	_____
<u>Kol Seal</u>	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
HANDLING	@	_____
MILEAGE <u>34</u>	@	_____

**REMARKS:**

circ 5 1/2 cas Pump 500gal ASF

1000 water plug RH & MH,

mix 125sx ASC. drop BBL

Plug Down 7:20 AM, release

float, held

Thanks

TOTAL \_\_\_\_\_

**SERVICE**

DEPTH OF JOB \_\_\_\_\_

PUMP TRUCK CHARGE \_\_\_\_\_

EXTRA FOOTAGE @ \_\_\_\_\_

MILEAGE 34 @ \_\_\_\_\_

PLUG Rubber @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

\_\_\_\_\_ @ \_\_\_\_\_

TOTAL \_\_\_\_\_

CHARGE TO: Deutch Oil Co.

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**FLOAT EQUIPMENT**

1-5 1/2 Annular Shoe @ \_\_\_\_\_

1- APII Insert @ \_\_\_\_\_

- Baskets @ \_\_\_\_\_

- Centerlines @ \_\_\_\_\_

1- Port collar @ \_\_\_\_\_

TOTAL \_\_\_\_\_

KANSAS

NOV

CONSERVATION DIVISION  
WICHITA

To Allied Cementing Co., Inc.  
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX \_\_\_\_\_

TOTAL CHARGE \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

RECEIVED  
KANSAS CORPORATION COMMISSION

NOV 24 1998

CONSERVATION DIVISION  
WICHITA, KS

SIGNATURE Cassy Coats

# ALLIED CEMENTING CO., INC. ORIGINAL - 4450

REMIT TO: P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
At Bend

DATE <u>11-17-97</u>	SEC. <u>22</u>	TWP. <u>23</u>	RANGE <u>16</u>	CALLED OUT <u>8:00AM</u>	ON LOCATION <u>9:45AM</u>	JOB START <u>12:00PM</u>	JOB FINISH <u>1:30PM</u>
LEASE <u>Hour</u>		WELL # <u>1-22</u>		LOCATION <u>Zook - 15, 1E, 1/2 S, E into</u>		COUNTY <u>Powder</u>	STATE <u>Ks</u>
OLD OR NEW (Circle one)							

CONTRACTOR Clayton Well Service

TYPE OF JOB Port collar

HOLE SIZE \_\_\_\_\_ T.D. 4100'

CASING SIZE 5 1/2" DEPTH 4099'

TUBING SIZE 2" DEPTH \_\_\_\_\_

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_

TOOL Port collar @ DEPTH 21089'

PRES. MAX 1000# MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. \_\_\_\_\_

PERFS. \_\_\_\_\_

OWNER Same

CEMENT

AMOUNT ORDERED 200 lb 60/40 290 Hel

1070 salt

10 lb Red

COMMON	@	_____
POZMIX	@	_____
GEL	@	_____
CHLORIDE	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
HANDLING	@	_____
MILEAGE	@	_____
		TOTAL _____

**EQUIPMENT**

PUMP TRUCK # <u>181</u>	CEMENTER <u>Tom A</u>
	HELPER <u>Bob B</u>
BULK TRUCK # <u>69</u>	DRIVER <u>Bud B</u>
BULK TRUCK # _____	DRIVER _____

**REMARKS:**

Pressure test to 1000# held. Mixed 10 lb Red, opened Port collar. Mixed 200 lb 60/40 290 Hel, 1070 salt. Displaced 9 1/2 bbls. Closed Port collar. Pressure to 1000# held. Ran 2 ft tubing & worked out.

Did not establish any returns.

Thanks

**SERVICE**

DEPTH OF JOB	<u>21089'</u>	_____
PUMP TRUCK CHARGE	_____	_____
EXTRA FOOTAGE	@	_____
MILEAGE	@	_____
PLUG	@	_____
_____	@	_____
_____	@	_____
		TOTAL _____

CHARGE TO: Deutch Oil Co.

STREET 1115 Bittering Bldg

CITY Wichita STATE Ks ZIP 67202

**FLOAT EQUIPMENT**

_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
		TOTAL _____

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TAX \_\_\_\_\_

TOTAL CHARGE \_\_\_\_\_

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

**RECEIVED**  
KANSAS CORPORATION COMMISSION

NOV 24 1998

SIGNATURE X Fred R. Burk

CONSERVATION DIVISION  
WICHITA, KS