

**KANSAS CORPORATION COMMISSION 1086002**  
**OIL & GAS CONSERVATION DIVISION**

Form ACO-1  
 June 2009  
**Form Must Be Typed**  
**Form must be Signed**  
 All blanks must be Filled

**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # 3180  
 Name: Deutsch, Kent A. dba Deutsch Oil Company  
 Address 1: 8100 E 22ND ST N  
 Address 2: \_\_\_\_\_  
 City: WICHITA State: KS Zip: 67226 + \_\_\_\_\_  
 Contact Person: kent deutsch  
 Phone: (316) 681-3567  
 CONTRACTOR: License # 34233  
 Name: Maverick Drilling LLC  
 Wellsite Geologist: Kent Deutsch  
 Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well     Re-Entry     Workover
- Oil     WSW     SWD     SIOW  
 Gas     D&A     ENHR     SIGW  
 OG     GSW     Temp. Abd.  
 CM (Coal Bed Methane)  
 Cathodic     Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_  
 Well Name: \_\_\_\_\_  
 Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_  
 Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD  
 Conv. to GSW  
 Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
 Commingled    Permit #: \_\_\_\_\_  
 Dual Completion    Permit #: \_\_\_\_\_  
 SWD    Permit #: \_\_\_\_\_  
 ENHR    Permit #: \_\_\_\_\_  
 GSW    Permit #: \_\_\_\_\_

<u>02/28/2012</u>	<u>03/08/2012</u>	<u>03/08/2012</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-025-21538-00-00  
 Spot Description: 205' SOUTH & 500' WEST  
SW NE NE NE Sec. 2 Twp. 30 S. R. 24  East  West  
535 Feet from  North /  South Line of Section  
380 Feet from  East /  West Line of Section  
 Footages Calculated from Nearest Outside Section Corner:  
 NE     NW     SE     SW  
 County: Clark  
 Lease Name: HERTLEIN Well #: 1-2  
 Field Name: \_\_\_\_\_  
 Producing Formation: none  
 Elevation: Ground: 2578 Kelly Bushing: 2585  
 Total Depth: 5560 Plug Back Total Depth: \_\_\_\_\_  
 Amount of Surface Pipe Set and Cemented at: 536 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**

(Data must be collected from the Reserve Pit)

Chloride content: 14500 ppm Fluid volume: 260 bbls  
 Dewatering method used: Hauled to Disposal  
 Location of fluid disposal if hauled offsite: \_\_\_\_\_  
 Operator Name: Thoroughbred Associates LLC  
 Lease Name: Weldon License #: 31514  
 Quarter NW Sec. 22 Twp. 32 S. R. 19  East  West  
 County: Comanche Permit #: D27987

**AFFIDAVIT**

I am the affiant and I hereby certify that 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.

Submitted Electronically

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
 Date: \_\_\_\_\_  
 Confidential Release Date: \_\_\_\_\_  
 Wireline Log Received  
 Geologist Report Received  
 UIC Distribution  
 ALT  I  II  III Approved by: Deanna Corbett Date: 07/11/2012



1086002

Operator Name: Deutsch, Kent A. dba Deutsch Oil Company Lease Name: HERTLEIN Well #: 1-2  
 Sec. 2 Twp. 30 S. R. 24  East  West County: Clark

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:  Dual Induction, Comp. Neutron/Density, Sonic, Micro	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Datum</th> </tr> </thead> <tbody> <tr> <td>Heebner Sh.</td> <td>4430</td> <td>1845</td> </tr> <tr> <td>Lansing</td> <td>4526</td> <td>1941</td> </tr> <tr> <td>Base K.C.</td> <td>5083</td> <td>2498</td> </tr> <tr> <td>Marmaton</td> <td>5104</td> <td>2519</td> </tr> <tr> <td>Atoka</td> <td>5350</td> <td>2765</td> </tr> <tr> <td>Mississippi</td> <td>5434</td> <td>2849</td> </tr> </tbody> </table>	Name	Top	Datum	Heebner Sh.	4430	1845	Lansing	4526	1941	Base K.C.	5083	2498	Marmaton	5104	2519	Atoka	5350	2765	Mississippi	5434	2849
Name	Top	Datum																				
Heebner Sh.	4430	1845																				
Lansing	4526	1941																				
Base K.C.	5083	2498																				
Marmaton	5104	2519																				
Atoka	5350	2765																				
Mississippi	5434	2849																				

CASING RECORD <input checked="" 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	12.25	8.625	23	536	CS-40 POZ 2% gel 1/4# floeal	375	2% gel, 1/4# floeal

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate				
___ Protect Casing	-			
___ Plug Back TD				
___ Plug Off Zone	-			

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

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. _____		Producing Method: <input 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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
---	--	--



# ALLIED CEMENTING CO., LLC. 038039

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

SERVICE POINT: Medicine Lake, KS

DATE <u>02-28-12</u>	SEC. <u>02</u>	TWP. <u>30s</u>	RANGE <u>24w</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>4:45 PM</u>
LEASE <u>Hutton</u>		WELL # <u>1-2</u>		LOCATION <u>Bloom, KS, 3/4 W, 1K S, 1/2 N</u>		COUNTY <u>Clark</u>	STATE <u>KS</u>
OLD OR NEW (Circle one)							

CONTRACTOR Maverick #106 OWNER Deutsch

TYPE OF JOB Surface  
 HOLE SIZE 12 1/4 TD. 539  
 CASING SIZE 8 7/8 24" DEPTH 534  
 TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_  
 TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_  
 PRES. MAX 300 MINIMUM \_\_\_\_\_  
 MEAS. LINE \_\_\_\_\_ SHOE JOINT N/A  
 CEMENT LEFT IN CSG. 20'  
 PERFS. \_\_\_\_\_

CEMENT AMOUNT ORDERED 375sx 60:40:2% gel + 3% CC + 1/4 # Flo seal

COMMON <u>class A</u>	<u>225x @</u>	<u>3656.25</u>
POZMIX	<u>150x @</u>	<u>1275.00</u>
GEL	<u>60x @</u>	<u>127.50</u>
CHLORIDE	<u>125x @</u>	<u>698.40</u>
ASC	<u>@</u>	

DISPLACEMENT 32 1/4 (366) Fresh H<sub>2</sub>O  
 EQUIPMENT  
 PUMP TRUCK CEMENTER D. Felling / Frank Woods  
 # 471-302 HELPER H. Piper  
 BULK TRUCK  
 # 356-290 DRIVER G. McLemore / B. Goins  
 BULK TRUCK  
 # \_\_\_\_\_ DRIVER \_\_\_\_\_

<u>Flo seal</u>	<u>94 # @</u>	<u>2.70</u>	<u>258.00</u>
	<u>@</u>		
	<u>@</u>		
	<u>@</u>		
	<u>@</u>		
	<u>@</u>		
	<u>@</u>		
HANDLING	<u>397</u>	<u>@</u>	<u>893.25</u>
MILEAGE	<u>50 397.11</u>	<u>@</u>	<u>2183.50</u>
TOTAL			<u>9092.20</u>

**REMARKS:**

Pipe on Bottom, Break Circ., Pump Spacing, Mix 375sx 60:40: Cement, Stop, Release Plug, Start Digging, Fresh H<sub>2</sub>O, Wash up on Plug, Set, measure with, Slow Rate, Stop Pump at 32 1/4 (366) total Dig. Shoring, Cement D & Circ.

**SERVICE**

DEPTH OF JOB	<u>534</u>		
PUMP TRUCK CHARGE			<u>1125.00</u>
EXTRA FOOTAGE	<u>234 @ .92</u>		<u>230.28</u>
MILEAGE	<u>50 @</u>		<u>350.00</u>
MANIFOLD	<u>head rental</u>	<u>@</u>	
	<u>Comp. Vehicle 50 @</u>		<u>200.00</u>
	<u>@</u>		

TOTAL 1905.28

CHARGE TO: Deutsch  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**PLUG & FLOAT EQUIPMENT**

<u>1-TWP</u>	<u>@</u>	<u>92.00</u>
<u>1-centralizer</u>	<u>@</u>	<u>64.00</u>
	<u>@</u>	
	<u>@</u>	
	<u>@</u>	

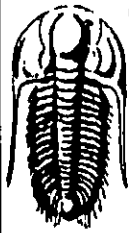
TOTAL 156.00

To Allied Cementing Co., LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) 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 and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES \_\_\_\_\_  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

PRINTED NAME  Cecil E. Farnor  
 SIGNATURE  Cecil E. Farnor

Bid adj. price 8923.64



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Deutsch Oil Co.  
8100 E 22nd St. N. bldg 600 Wichita Ks.  
ATTN: Kent D

2/30/24  
**Hertein 1-2**  
Job Ticket: 41247      **DST#: 1**  
Test Start: 2012.03.05 @ 19:00:00

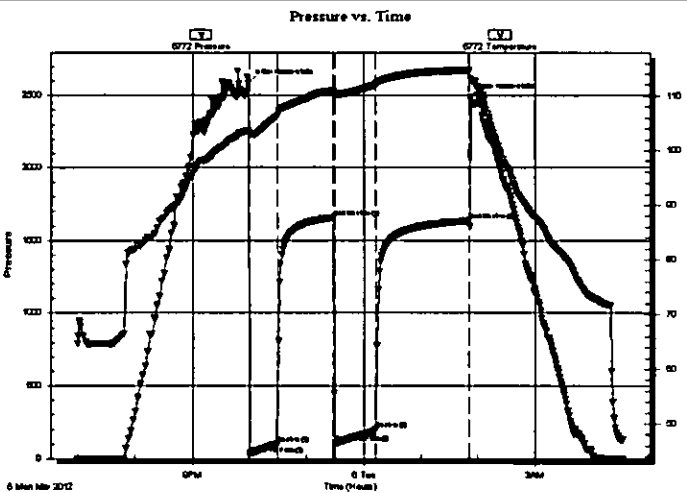
### GENERAL INFORMATION:

Formation: **Mar/Fort Sc.**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 22:00:00  
Time Test Ended: 04:32:45  
Interval: **5150.00 ft (KB) To 5223.00 ft (KB) (TVD)**  
Total Depth: **5223.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Harley Davidson  
Unit No: 58  
Reference Elevations: **2587.00 ft (KB)**  
**2576.00 ft (CF)**  
KB to GR/CF: **11.00 ft**

### Serial #: 6772

Press@RunDepth: 195.54 psig @ ft (KB)  
Start Date: 2012.03.05      End Date: 2012.03.06  
Start Time: 19:00:05      End Time: 04:32:45  
Capacity: 8000.00 psig  
Last Calib.: 2012.03.06  
Time On Btm: 2012.03.05 @ 21:58:45  
Time Off Btm: 2012.03.06 @ 01:52:30

TEST COMMENT: IF- Weak building blow BOB 30min.  
IS- No blow back.  
FF- Weak building blow 6" into bucket.  
FS- No blow back.



### PRESSURE SUMMARY

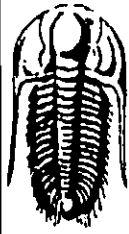
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2588.78	103.65	Initial Hydro-static
2	26.71	103.19	Open To Flow (1)
30	98.40	106.30	Shut-In(1)
89	1656.69	110.94	End Shut-In(1)
92	102.00	110.46	Open To Flow (2)
134	195.54	112.04	Shut-In(2)
232	1635.13	114.75	End Shut-In(2)
234	2486.71	113.11	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
400.00	15% mud 85% water with trace gas and	5.61

### Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Deutsch Oil Co.

2/30/24

8100 E 22nd St. N. bldg 600 Wichita Ks.

Hertein 1-2

Job Ticket: 41247

DST#: 1

ATTN: Kent D

Test Start: 2012.03.05 @ 19:00:00

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbf

Water Loss: 10.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 11800.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbf
400.00	15% mud 85% water with trace gas and oil	5.611

Total Length: 400.00 ft

Total Volume: 5.611 bbf

Num Fluid Samples: 0

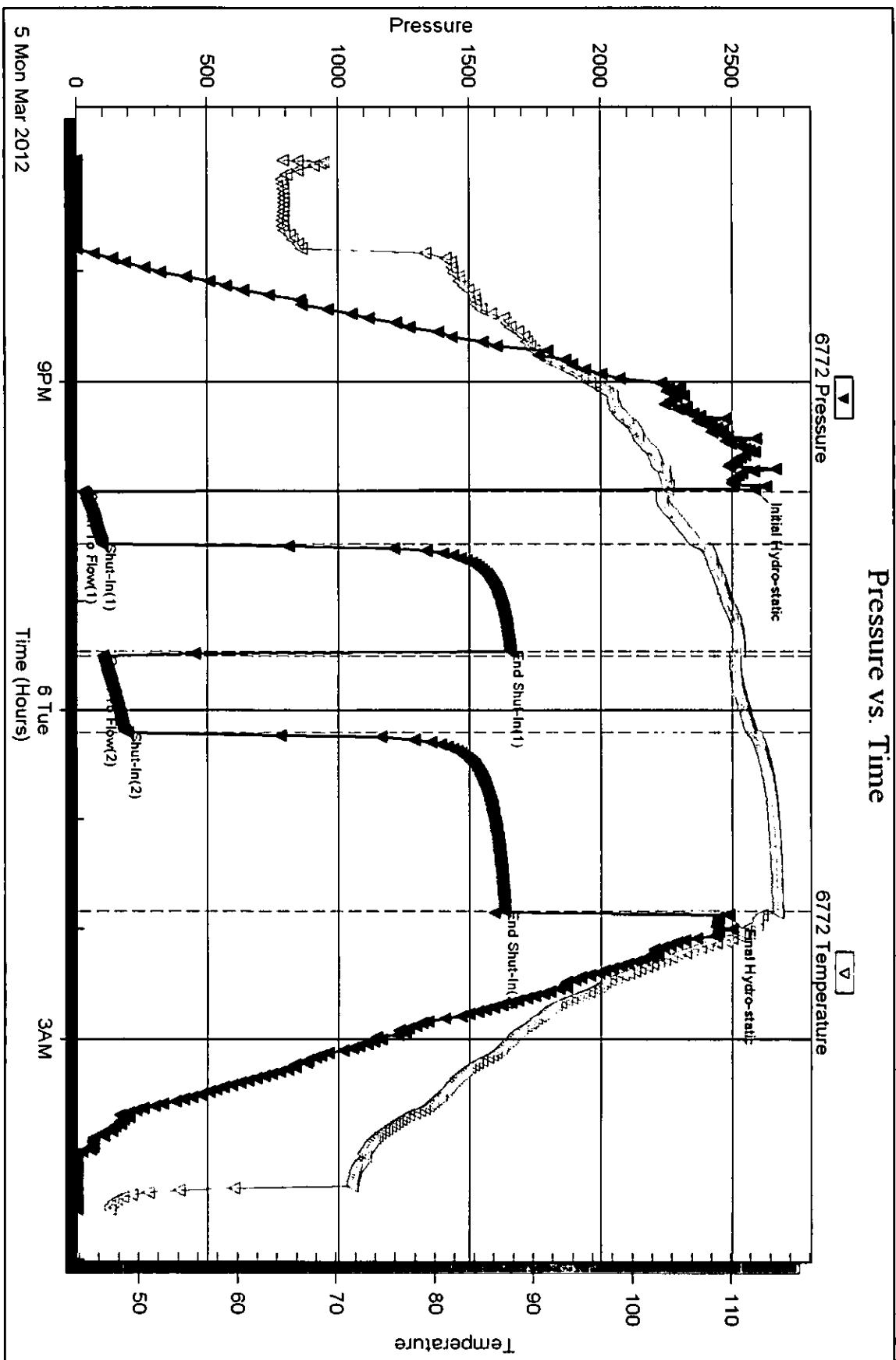
Num Gas Bombs: 0

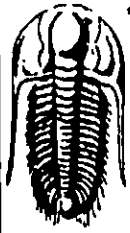
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Deutsch Oil Co.  
8100 E 22nd St. N. bldg 600 Wichita Ks.  
ATTN: Kent D

2/30/24  
**Hertein 1-2**  
Job Ticket: 41248      **DST#: 2**  
Test Start: 2012.03.07 @ 04:00:00

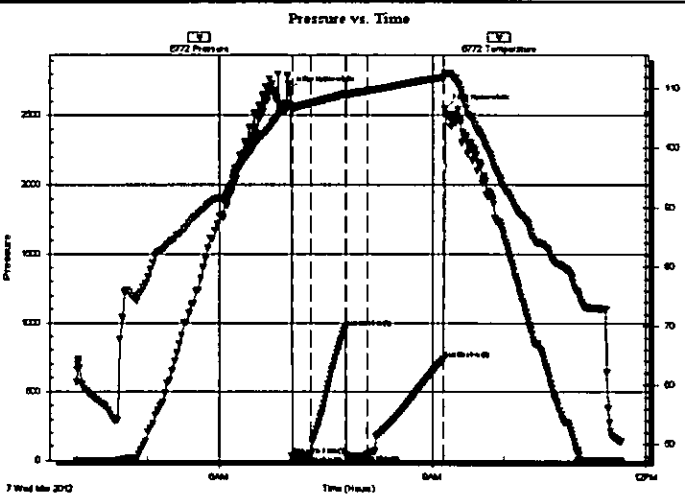
## GENERAL INFORMATION:

Formation: **Morrow**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 07:01:15  
Time Test Ended: 11:39:45  
Interval: **5335.00 ft (KB) To 5410.00 ft (KB) (TVD)**  
Total Depth: 5410.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Harley Davidson  
Unit No: 58  
Reference Elevations: 2587.00 ft (KB)  
2576.00 ft (CF)  
KB to GR/CF: 11.00 ft

## Serial #: 6772

Press@RunDepth: 37.50 psig @ ft (KB) Capacity: 8000.00 psig  
Start Date: 2012.03.07 End Date: 2012.03.07 Last Calib.: 2012.03.07  
Start Time: 04:00:05 End Time: 11:39:44 Time On Btrr: 2012.03.07 @ 06:59:15  
Time Off Btrr: 2012.03.07 @ 09:10:15

**TEST COMMENT:** IF- Weak blow .5" into bucket.  
IS- No blow back.  
FF- No blow .  
FS- No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2685.39	107.03	Initial Hydro-static
2	33.74	106.56	Open To Flow (1)
18	36.28	107.54	Shut-In(1)
47	962.42	109.05	End Shut-In(1)
48	38.07	108.85	Open To Flow (2)
66	37.50	109.60	Shut-In(2)
130	733.68	111.90	End Shut-In(2)
131	2550.15	112.63	Final Hydro-static

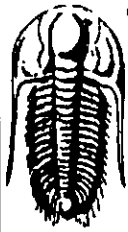
## Recovery

Length (ft)	Description	Volume (bbl)
25.00	100% mud	0.35

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Deutsch Oil Co.

2/30/24

8100 E 22nd St. N. bldg 600 Wichita Ks.

**Hertein 1-2**

Job Ticket: 41248

**DST#: 2**

ATTN: Kent D

Test Start: 2012.03.07 @ 04:00:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9600.00 ppm

Filter Cake: inches

### Recovery Information

#### Recovery Table

Length ft	Description	Volume bbl
25.00	100% mud	0.351

Total Length: 25.00 ft      Total Volume: 0.351 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6772

Deutsch Oil Co.

Herren 1-2

DST Test Number: 2

