



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1187314  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

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
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ 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: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

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

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1187314

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

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:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing     Pumping     Gas Lift     Other *(Explain)* \_\_\_\_\_

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

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

Petroleum Geologist  
212 Main Street  
P.O. Box 215  
Claflin, KS 67525

Office (620) 588-4250

Res. Claflin (620) 587-3444

Mai Oil Operations  
Axman-Stoss Unit #1  
NE-NW-NE-SE (2480' FSL & 980' FEL)  
Section 7-17s-14w  
Barton County, Kansas  
Page 1

**Dry and Abandoned**

**Contractor:** Southwind Drilling Co. (Rig #3)  
**Commenced:** December 14, 2013  
**Completed:** December 20, 2013  
**Elevation:** 1963' K.B; 1961' D.F; 1955' G.L.  
**Casing program:** Surface; 8 5/8" @ 941'  
Production; none.  
**Sample:** Samples saved and examined 2800' to the Rotary Total Depth.  
**Drilling time:** One (1) foot drilling time recorded and kept 2800 ft. to the Rotary Total Depth.  
**Measurements:** All depths measured from the Kelly Bushing.  
**Drill Stem Tests:** There were two (2) Drill Stem Tests ran by Trilobite Testing Co.  
**Electric Log:** None.  
**Commenced:** December 14, 2013

<u>Formation</u>	<u>Log Depth</u>	<u>Sub-Sea Datum</u>
Anhydrite	938	+1025
Base Anhydrite	965	+998
Heebner	3140	-1177
Toronto	3152	-1189
Douglas	3172	-1209
Brown Lime	3207	-1244
Lansing	3222	-1259
Arbuckle	3484	-1521
Rotary Total Depth	3497	-1534

(All top and zone determination were made from a correlation of Electric Log measurements).

**SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.**

**TOPEKA SECTION**

3062-3078' Limestone; tan, cream, fine and medium crystalline slightly dolomitic, poor intercrystalline type porosity, no shows.

3092-3100' Limestone; cream, white, light gray, finely crystalline, fossiliferous, trace spotty stain, no free oil and no odor in fresh samples.

**TORONTO SECTION**

3152-3162' Limestone; white, cream, finely crystalline, few fossiliferous, chalky, poor pinpoint porosity, trace poor stain, no free oil and no odor.

**LANSING SECTION**

3222-3228' Limestone; white, cream, finely crystalline, oolitic/fossiliferous, chalky, poor visible porosity, plus white/cream, chert.

3240-3248' Limestone; cream, tan, finely crystalline, oolitic, poor porosity, chalky in part, plus chert as above.

3273-3280' Limestone; cream, white, finely crystalline, oolitic, chalky, poor porosity, no shows.

3298-3306' Limestone; cream, white, tan, finely crystalline, oolitic, oomoldic, poor to fair oomoldic porosity, golden brown stain, show of free oil and faint odor in fresh samples.

**Drill Stem Test #1 3260-3305'**

**Times: 30-45-45-60**

**Blow: Strong**

**Recovery: 90' thin watery mud  
 180' muddy water**

**Pressures: ISIP 576 psi  
 FSIP 559 psi  
 IFP 21-83 psi  
 FFP 85-150 psi  
 HSH 1606-1597 psi**

3348-3353' Limestone; cream, white, tan, finely crystalline, few oolitic/fossiliferous, slightly chalky, poor visible porosity, no shows.

3376-3386' Limestone; cream, tan, finely crystalline, few fossiliferous, chalky, poorly develop porosity, spotty brown stain, no show of free oil and no door.

3400-3410' Limestone; cream, white, finely crystalline, dense.

**CONGLOMERATE SECTION**

3438-3484' Varied colored chert in matrix of varied colored shale.

**Pressures: ISIP 576 psi  
 FSIP 559 psi  
 IFP 21-83 psi  
 FFP 85-150 psi  
 HSH 1606-1597 psi**

**ARBUCKLE SECTION**

3484-3497' Dolomite; white/cream, fine and medium crystalline, poor to fair intercrystalline to fine vuggy porosity, scattered stain, trace free oil and faint odor in fresh samples

**Drill Stem Test #2 3414-3497'**

**Times: 15-45-15-45**

**Blow: Strong**

**Recovery: 2450' muddy water**

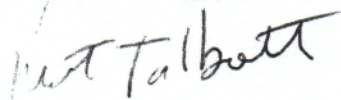
**Pressures:** ISIP 1130 psi  
FSIP 1151 psi  
IFP 881-1054 psi  
FFP 1072-1130 psi  
HSH 1726-1686 psi

**Rotary Total Depth 3497**

**Recommendations:**

The Mai Oil Operations, Axman-Stoss Unit #1 was plugged and abandoned at the Rotary Total Depth 3497.

Respectfully submitted;



Kurt Talbott,  
Petroleum Geologist

Pressures: ISIP 1130 psi  
FSIP 1151 psi  
IFP 881-1054 psi  
FFP 1072-1130 psi  
HSH 1726-1686 psi

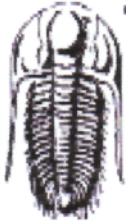
Rotary Total Depth 3497

Recommendations:

The Mai Oil Operations, Axman-Stoss Unit #1 was plugged and abandoned at the Rotary Total Depth 3497.

Respectfully submitted;

Kurt Talbott,  
Petroleum Geologist



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Mai Oil Operations  
 8411 Preston Rd STE 800  
 Dallas TX 75225  
 ATTN: Kurt Talbott

**7-17s-14w Barton,KS**  
**Axman-Stoss Unit #1**  
 Job Ticket: 56029 **DST#: 1**  
 Test Start: 2013.12.18 @ 20:30:34

**GENERAL INFORMATION:**

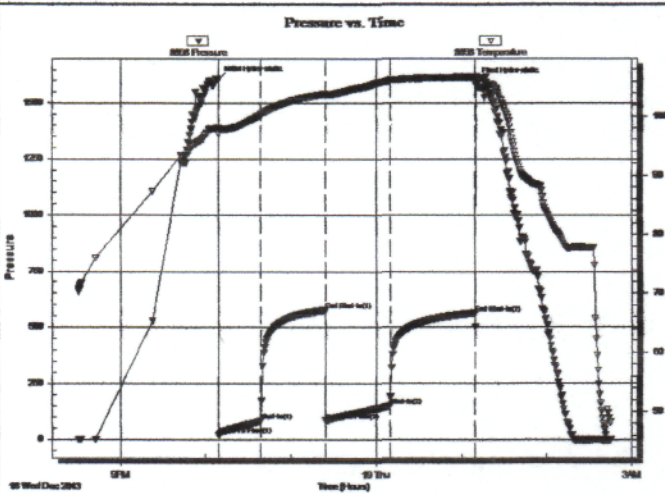
Formation: **LKC E-G**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:09:14  
 Time Test Ended: 02:45:04  
 Interval: **3260.00 ft (KB) To 3305.00 ft (KB) (TVD)**  
 Total Depth: 3305.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Tate Lang  
 Unit No: 49  
 Reference Elevations: 1963.00 ft (KB)  
 1955.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8898**

**Outside**

Press@RunDepth: 149.69 psig @ 3269.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.12.18 End Date: 2013.12.19 Last Calib.: 2013.12.19  
 Start Time: 20:30:35 End Time: 02:45:04 Time On Btm: 2013.12.18 @ 22:09:04  
 Time Off Btm: 2013.12.19 @ 01:10:24

**TEST COMMENT:** B.O.B. In 20 mins  
 Dead no blow back  
 B.O.B. In 30 mins  
 Dead no blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1606.31	97.98	Initial Hydro-static
1	21.28	96.90	Open To Flow (1)
30	82.96	100.31	Shut-In(1)
76	575.52	103.83	End Shut-In(1)
76	85.48	103.61	Open To Flow (2)
121	149.69	106.09	Shut-In(2)
181	559.12	106.65	End Shut-In(2)
182	1597.16	106.65	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
180.00	95%W 5%M	2.25
90.00	10%W 90%M	1.26

**Gas Rates**

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



**TRILOBITE TESTING, INC**

**DRILL STEM TEST REPORT**

Mai Oil Operations  
 8411 Preston Rd STE 800  
 Dallas TX 75225  
 ATTN: Kurt Talbott

**7-17s-14w Barton,KS**  
**Axman-Stoss Unit #1**  
 Job Ticket: 56030 **DST#: 2**  
 Test Start: 2013.12.20 @ 00:00:05

**GENERAL INFORMATION:**

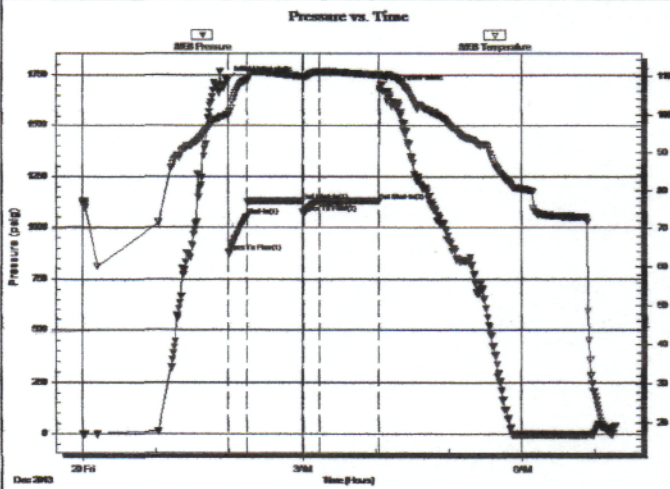
Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 01:59:25  
 Time Test Ended: 07:16:14  
 Interval: **3414.00 ft (KB) To 3497.00 ft (KB) (TVD)**  
 Total Depth: 3497.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Tate Lang  
 Unit No: 49  
 Reference Elevations: 1963.00 ft (KB)  
 1955.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8898**

**Outside**

Press@RunDepth: 1129.71 psig @ 3429.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.12.20 End Date: 2013.12.20 Last Calib.: 2013.12.20  
 Start Time: 00:00:06 End Time: 07:16:15 Time On Btm: 2013.12.20 @ 01:59:05  
 Time Off Btm: 2013.12.20 @ 04:03:15

**TEST COMMENT:** B.O.B. in 30 sec  
 Dead no blow back  
 B.O.B. in 30 sec  
 Dead no blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1726.41	99.87	Initial Hydro-static
1	880.83	99.65	Open To Flow (1)
16	1054.34	108.89	Shut-In(1)
62	1130.44	109.87	End Shut-In(1)
62	1072.31	109.84	Open To Flow (2)
75	1129.71	111.10	Shut-In(2)
124	1130.57	110.20	End Shut-In(2)
125	1685.72	110.32	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
1860.00	98%W 2%M	25.82
310.00	50%W 50%M	4.35
280.00	30%W 70%M	3.93

\* Recovery from multiple tests

**Gas Rates**

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



# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 7498

Date	12-15-13	Sec.	7	Twp.	17	Range	14	County	Barton	State	KS	On Location		Finish	11:30 a.m.
------	----------	------	---	------	----	-------	----	--------	--------	-------	----	-------------	--	--------	------------

Location Hwy 41281 30 RD 150 3W 1/2 W into

Lease	<u>Axman-Stoss</u>	Well No.	<u>1</u>	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor	<u>Southwind #3</u>				
Type Job	<u>Surface</u>				
Hole Size	<u>12 1/4</u>	T.D.	<u>941</u>	Charge To	<u>Mei Oil</u>
Csg.	<u>8 5/8</u>	Depth	<u>940</u>	Street	
Tbg. Size		Depth		City	State
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Cement Left in Csg.	<u>40'</u>	Shoe Joint		Cement Amount Ordered	<u>350 6 3/4 3/10 2/62</u>
Meas Line		Displace	<u>57 BL</u>		

**EQUIPMENT**

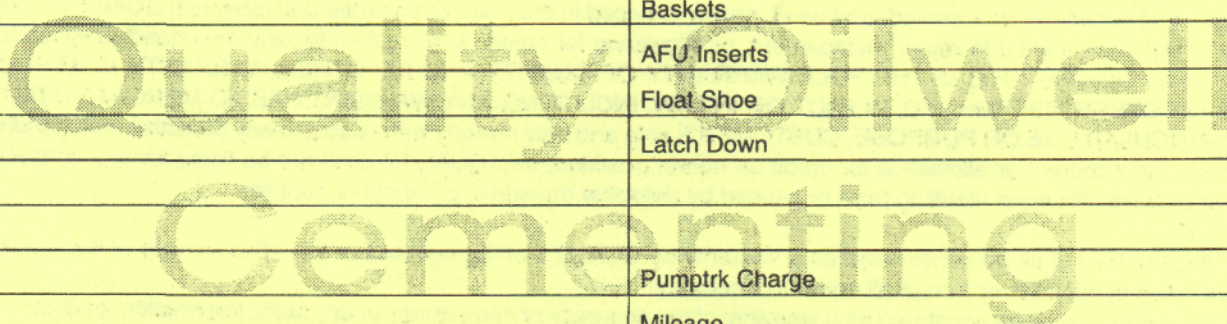
Pumptrk	<u>16</u>	No.		Cementer	<u>Eric</u>	Common
				Helper		Poz. Mix
Bulktrk		No.		Driver	<u>Brett</u>	Gel.
				Driver		Calcium
Bulktrk	<u>12</u>	No.		Driver	<u>Clayton</u>	
				Driver		

**JOB SERVICES & REMARKS**

Remarks:		Hulls
Rat Hole		Salt
Mouse Hole		Flowseal
Centralizers		Kol-Seal
Baskets		Mud CLR 48
D/V or Port Collar		CFL-117 or CD110 CAF 38
		Sand
	<u>8 5/8 on bottom - BS + Circulation</u>	Handling
	<u>Mix 300 BK + Displace Plug</u>	Mileage

**FLOAT EQUIPMENT**

		Guide Shoe	<u>8 5/8 Rubber Plug</u>
		Centralizer	
		Baskets	
		AFU Inserts	
		Float Shoe	
		Latch Down	



		Pumptrk Charge	
		Mileage	
		Tax	
		Discount	
		Total Charge	

X Signature Jay Klein

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 7673

Date	Sec.	Twp.	Range	County	State	On Location	Finish
12-20-13	7	17	14	Barton	KS		6:30 PM

Location 231 & Eggs 4 sale line, 3w to 70 Rd, 1/2 N,

Lease Axman - stress unit	Well No. 1	Owner wnz
Contractor Southwind 3		To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Type Job Plug		
Hole Size 7 7/8	T.D.	Charge To Ma. Oil
Csg.	Depth	Street
Tbg. Size	Depth	City State
Tool	Depth	The above was done to satisfaction and supervision of owner agent or contractor.
Cement Left in Csg.	Shoe Joint	Cement Amount Ordered 220sx 60/40 4% gel 1/4 # Flow

Meas Line Displace

EQUIPMENT		Common
Pumptrk 15	No. Cementer Helper Nick	Poz. Mix
Bulktrk 13	No. Driver Lonnie W.	Gel.
Bulktrk P4	No. Driver Travis	Calcium

JOB SERVICES & REMARKS

Remarks:	Salt
Rat Hole	Flowseal
Mouse Hole	Kol-Seal
Centralizers	Mud CLR 48
Baskets	CFL-117 or CD110 CAF 38
D/V or Port Collar	Sand
50sx at 3463	Handling
50sx at 990	Mileage

FLOAT EQUIPMENT

80sx at 450	Guide Shoe
10sx at 40 with plug	Centralizer
30sx Rat	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
	1 wood plug
	Pumptrk Charge
	Mileage

	Tax
	Discount
X Signature Jay Davis	Total Charge