

CONFIDENTIAL

FORM MUST BE TYPED

SIDE ONE

ORIGINAL

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

API NO. 15- 071-20644 - 0000
County Greeley
SW - SW - - Sec. 12 Twp. 17S Rge 41 X W

Operator: License # 30606
Name: Murfin Drilling Co., Inc.
Address 250 N. Water, Suite 300
City/State/Zip Wichita, KS 67202

4-26-96
660 Feet from S/N (circle one) Line of Section
4620 Feet from E/W (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Purchaser: Natural Gas Clearinghouse
Operator Contact Person: Larry M. Jack
Phone (316) 267 - 3241

Lease Name Sandifer Well # 1-12
Field Name Byerly
Producing Formation Winfield

Contractor: Name: Murfin Drilling Company, Inc.
License: 30606

Elevation: Ground 3705.8 KB 3711
Total Depth 3200 PBTB 3158

Wellsite Geologist: None

Amount of Surface Pipe Set and Cemented at 357 Feet
Multiple Stage Cementing Collar Used? X Yes ___ No

Designate Type of completion
X New Well ___ Re-Entry ___ Workover

If yes, show depth set 2332 Feet

Oil ___ SWD ___ SIOW ___ Temp. Abd.
X Gas ___ ENHR ___ SIGW
___ Dry ___ Other (Core, WSW, Expl., Cathodic, etc)

If Alternate II completion, cement circulated from _____

If Workover/Re-Entry: old well info as follows:

feet depth to _____ w/ _____ sx cmt.

Operator: _____

Drilling Fluid Management Plan alt 2 part 6-14-96
(Data must be collected from the Reserve Pit) met

Well Name: _____

Chloride content 7000 ppm Fluid volume 2500 bbls

Comp. Date _____ Old Total Depth _____

Dewatering method used Evaporation

___ Deepening ___ Re-perf. ___ Conv. to Inj/SWD
___ Plug Back ___ PBTB
___ Commingled ___ Docket No. _____
___ Dual Completion ___ Docket No. _____
___ Other (SWD or Inj?) ___ Docket No. _____

Location of fluid disposal if hauled offsite:

RELEASED

1/08/96 1/12/96 3/14/96
Spud Date Date Reached TD Completion Date

Operator Name _____

Lease Name _____ License No. SEP 16 1998

____ Quarter Sec. _____ Twp. FROM CONFIDENTIAL Rng. _____ E/W

County _____ Docket No. _____

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 Larry M. Jack

Title Larry M. Jack, Production Manager Date 4/26/96

Subscribed and sworn to before me this 26 day of April 19 96.

Notary Public Kerran Redington

Date Commission Expires 2/6/98
Kerran Redington
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. 2-6-98

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)

SIDE TWO

Operator name Murfin Drilling Co., Inc.

Lease Name Sandifer Well # 1-12

Sec. 12 Twp. 17S Rge. 41 East West

County Greeley

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 (Attach Additional Sheets.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Log Formation (Top), Depth and Datums <input type="checkbox"/> Sample Name Top Datum Stone Corral 2644 +1067 B/Stone Corral 2668 +1043 Winfield 2921 +790 Ft. Riley 2971 +740
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 (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
List all E.Log		

CASING RECORD <u> </u> New <u> </u> 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 1/4"	8 5/8"	24#	357	60/40 Poz	250	3% cc, 2% gel
Production	7 7/8	4 1/2	10.5#	3204	Premium EA2	125	7% Cal-seal .6% Halad

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

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	2950-53'		500 gal. 15% HCL	2950-53 & 2959-62
4	2959-62'		Frac w/17,000 gal. 70Q Foam, 14,600 SCF N2 & 15,000# sand	2950-53 & 2959-62

TUBING RECORD		Size <u>2 3/8</u>	Set At <u>2977</u>	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj. <u>3/14/96</u>			Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other		
Estimated Production Per 24 Hours	Oil Bbls	Gas 9 Mcf	Water 108 Bbls.	Gas-Oil Ratio	Gravity

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

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: As above.

ALLIED CEMENTING CO., INC. 3846

ORIGINAL

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

CONFIDENTIAL

SERVICE POINT: Oakley

DATE <u>1-8-96</u>	SEC. <u>12</u>	TWP. <u>17^s</u>	RANGE <u>41^s</u>	CALLED OUT	ON LOCATION <u>8:00 PM</u>	JOB START	JOB FINISH <u>10:00 PM</u>
LEASE <u>Sandifer</u>	WELL# <u>1-12</u>	LOCATION <u>Tribune 8N-3W-N.S.</u>	COUNTY <u>Greeley</u>	STATE <u>Kan</u>			

OLD OR (NEW) (Circle one)

CONTRACTOR MurFin Dels Co #3

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 357'

CASING SIZE 8 3/8 DEPTH 357'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

OWNER Same

CEMENT

AMOUNT ORDERED 250 sks 60/40 per.
3% cc - 2% lat

COMMON	<u>150 sks</u>	@	<u>7.20</u>	<u>1,080.00</u>
POZMIX	<u>100 sks</u>	@	<u>3.15</u>	<u>315.00</u>
GEL	<u>4 sks</u>	@	<u>9.50</u>	<u>38.00</u>
CHLORIDE	<u>8 sks</u>	@	<u>28.00</u>	<u>224.00</u>
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>250 sks</u>	@	<u>1.05</u>	<u>262.50</u>
MILEAGE	<u>44 per sk/mile</u>			<u>780.00</u>

EQUIPMENT

PUMP TRUCK CEMENTER Walt

300 HELPER Terry

BULK TRUCK

218 DRIVER Dean

BULK TRUCK

DRIVER

TOTAL 2,699.50

REMARKS:

SERVICE

Comment Did Circ

Walt

DEPTH OF JOB	<u>357'</u>
PUMP TRUCK CHARGE	<u>445.00</u>
EXTRA FOOTAGE <u>57'</u>	@ <u>8.40</u> <u>23.32</u>
MILEAGE <u>78-mile</u>	@ <u>2.32</u> <u>183.36</u>
PLUG <u>8 3/8 Surface Plug</u>	@ <u>4.50</u>
	@
	@

TOTAL 696.68

CHARGE TO: MurFin Dels Co.

STREET 250 N Water # 300

CITY Wichita STATE Kan ZIP 67202

FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	

TOTAL _____

TAX _____

TOTAL CHARGE _____

DISCOUNT _____ IF PAID IN 30 DAYS

RELEASED
SEP 16 1998

FROM CONFIDENTIAL

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.

SIGNATURE Keith Van Zett

ORIGINAL



HALLIBURTON

NEW YORK, N.Y.
P.O. BOX 951046
DALLAS, TX 75395-1046

INVOICE

ORIGINAL

INVOICE NO.	DATE
881069	01/12/1997

WELL LEASE NO./PROJECT		WELL/PROJECT LOCATION		STATE	OWNER
SANDIFER 1-12		GREELEY		KS	GAME
SERVICE LOCATION		CONTRACTOR	JOB PURPOSE		TICKET DATE
LIBERAL		MURFIN DRILLING	CEMENT PRODUCTION CASING		01/12/1997
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
614500	PETE KUNEYL			COMPANY TRUCK	0228

CONFIDENTIAL

MURFIN DRG CO
2914 W. JONES AVENUE
GARDEN CITY, KS 67846

DIRECT CORRESPONDENCE TO:

P O BOX 1598
LIBERAL KS 67901

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
PRICING AREA - MID CONTINENT					
000-117	MILEAGE CEMENTING ROUND TRIP	300 MI		2.85	855.00
		1 UNT			
001-016	CEMENTING CASING	3204 FT		1,500.00	1,500.00
		1 UNT			
593	3 WIPER L-D PLUG - 4 1/2"	1 EA		159.00	159.00
	801.0373				
594	4 1/2" LATCH DOWN RAFFLE	1 EA		100.00	100.00
	801.03734				
26	INSERT VALVE F. S. - 4 1/2"	1 EA		285.00	285.00
	847.6316				
27	FILL-UP UNIT 4 1/2"-5"	1 EA		47.00	47.00
	815.19111				
40	CENTRALIZER 4-1/2 X 7-7/8	10 EA		50.00	500.00
	806.60004				
320	BASKET-CMT-4 1/2 CSG X 18"OD-	1 EA		97.00	97.00
	806.71415				
60	CLEANER-ROTO WALL-LOOPED CABLE	10 EA		18.30	183.00
	807.00084				
019-240	CASING SWIVEL U/WALL CLEANERS	1 EA		180.00	180.00
018-317	SUPER FLUSH	12 SK		100.00	1,200.00
504-043	CEMENT - PREMIUM	140 SK		11.08	1,551.20
508-127	CAL SEAL 30	9 SK		25.90	233.10
507-775	HALAD-322	79 LB		7.00	553.00
507-970	D-AIR 1, POWDER	35 LB		3.25	113.75
509-969	SALT	113 LB		1.15	136.95
500-207	BULK SERVICE CHARGE	165 CFT		1.35	222.75
500-306	MILEAGE CMTG MAY DEL OR RETURN	1133.10 MI		.95	1,076.45

RELEASED

SEP 16 1998

FROM CONFIDENTIAL

INVOICE SUBTOTAL

8,993.20

received
JAN 18 1998

[Handwritten Signature]

***** CONTINUED ON NEXT PAGE *****

see next page

TERMS: If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

WELL DATA

FIELD _____ SEC. 12 TWP. 17S RING 41W COUNTY GREELEY STATE KS.

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD _____

PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD _____

COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____

PACKER TYPE BAKER-PORT COLLAR SET AT 2334

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	10.5	4 1/2	PB	3200	
INNER CSG	U	24	8 7/8	GL.	357	
TUBING						
OPEN HOLE			7 1/8	357	3200	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
PISTON COLLAR <u>7/16</u>	<u>1</u>	<u>H</u>
FLOAT SHOE <u>INSERT</u>	<u>1</u>	
GUIDEWIRE <u>RATO WALL CLEANERS</u>	<u>10</u>	<u>5EA O</u>
CENTRALIZERS <u>S-4</u>	<u>10</u>	
REGULATING <u>LATCH DOWN BAFFLE</u>	<u>1</u>	<u>W</u>
TOP PLUG <u>LATCH DOWN</u>	<u>1</u>	
HEAD <u>CSG SWIVEL</u>	<u>1</u>	<u>C</u>
WASHER <u>CEMENT BASKET</u>	<u>1</u>	
OTHER		<u>O</u>

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB./GAL. °API _____

DISPL. FLUID _____ DENSITY _____ LB./GAL. °API _____

PROP. TYPE _____ SIZE _____ LB. _____

PROP. TYPE _____ SIZE _____ LB. _____

ACID TYPE _____ GAL. _____ % _____

ACID TYPE _____ GAL. _____ % _____

ACID TYPE _____ GAL. _____ % _____

SURFACTANT TYPE _____ GAL. _____ IN _____

NE AGENT TYPE _____ GAL. _____ IN _____

FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN _____

GELLING AGENT TYPE _____ GAL. _____ IN _____

FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN _____

BREAKER TYPE _____

BLOCKING AGENT TYPE _____ GAL.-LB. _____

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER _____

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>1-11-96</u>	DATE <u>1-11-96</u>	DATE <u>1-12-96</u>	DATE <u>1-12-96</u>
TIME <u>1700</u>	TIME <u>2330</u>	TIME <u>0420</u>	TIME <u>0500</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>T. Broadfoot</u>	<u>420045</u>	<u>LIBERAL KS.</u>
<u>R. CRIST</u>	<u>52276</u>	<u>"</u>
<u>J. FROST</u>	<u>52827</u>	<u>HUGOTON KS.</u>
	<u>69775</u>	<u>75237</u>

DEPARTMENT CEMENT

DESCRIPTION OF JOB CEMENT 4 1/2 LONG STRING

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE X JR

HALLIBURTON OPERATOR J. Broadfoot COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF BAGS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<u>1</u>	<u>140</u>	<u>PREM</u>		<u>B</u>	<u>7%EA2-6%ACAD 322-1/4 D.AIR 15%SAU</u>	<u>1.30</u>	<u>15.8</u>

PRESSURES IN PSI

CIRCULATING _____ DISPLACEMENT _____

BREAKDOWN _____ MAXIMUM _____

AVERAGE _____ FRACTURE GRADIENT _____

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____

HYDRAULIC HORSEPOWER _____

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET 40 REASON SHOE JT

SUMMARY

PRESLUSH BBL 5-12-5 TYPE N^o-5 SUP^{er} LENS^{er}-H^o

LOAD & BKDN: BBL-GAL. _____ PAD: BBL-GAL. _____

TREATMENT BBL-GAL. 8 DISPL BBL-GAL. 50.3

CEMENT SLURRY BBL-GAL. 32.4

TOTAL VOLUME: BBL-GAL. _____

REMARKS

MSTDs GIVEN TO CO MAN

ROTATED ALL JOB - CIRCULATED GOOD

JOB WELL DONE - NO ACCIDENT

CUSTOMER MURFIN DRILLING

LEASE SANDYFER

WELL NO. _____

JOB TYPE 4 1/2 LONG STRING

DATE 1-11-12-96

CUSTOMER: MURFIN ARUG. WELL NO.: LEASE: SANDIFER JOB TYPE: 4 1/2 LONG STRING TICKET NO.: 881068

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1700							called out READY 2400
	2330							ON LOCK. - L.O.D.P
	0200							START CSG IN HOLE
	0330							HOOK UP TO CMT HEAD "RATE"
	0345							CIRCULATION TO PIT - SAFETY MEETING
	0420							HOOK UP TO CMT LINE
	0423	3.0	5					START H ₂ O SPACER
	0425	3.0	12					START SUPER FLUSH
	0428	3.0	5					START H ₂ O SPACER
	0430	1.2	5				180	START CMT 15.8 gal R.H.
	0434	4.6	27.4				200	SWITCH TO CMT DOWN HOLE
	0440	0	0				0	SHUT OFF WASH UP - DROP PLUG
	0444	3.7	40.4				0	START DISPLACEMENT H ₂ O
	0455	2	10				480	SLOW RATE - (50.4 TOTAL BBL)
	0500	0	-				1200	PLUG LANDED - FLOAT HELD
								Job OVER

CONFIDENTIAL

050
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THANKS FOR CALLING
 HALLIBURTON ENERGY SERVICES
 LIBERAL OK.

"HAVE A GOOD DAY"

BROADFOOT-CRIST - FROST

MSDS GIVEN TO CO MAN

ROTATED ALL OF JOB
 CIRCULATION GOOD

Job Time 40min
 Lock Time 6hr 30min.

RELEASED
 SEP 16 1998
 FROM CONFIDENTIAL

FIELD _____ SEC 12 TWP. 17S RNG. 41W COUNTY GREELEY STATE KS.

FORMATION NAME _____ TYPE _____
 FORMATION THICKNESS _____ FROM _____ TO _____
 INITIAL PROD. OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD
 PRESENT PROD. OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD
 COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____
 PACKER TYPE BAKER-PORT COLLAR SET AT 2334
 BOTTOM HOLE TEMP. _____ PRESSURE _____
 MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	10.5	4 1/2	KB	3200	
LINEP	u	24	8 5/8	GL.	357	
TUBING						
OPEN HOLE			7 7/8	357	3200	SHOTS FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>1-11-96</u>	DATE <u>1-11-96</u>	DATE <u>1-12-96</u>	DATE <u>1-12-96</u>
TIME <u>1700</u>	TIME <u>2330</u>	TIME <u>0420</u>	TIME <u>0500</u>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
<u>7 1/2</u>		
PURCHASE COLLAR <u>Fillup</u>	<u>1</u>	<u>H</u>
FLOAT SHOE <u>INSERT</u>	<u>1</u>	
GUIDEWIRE <u>ROTO WALL CLEANERS</u>	<u>10</u>	<u>SEA</u>
CENTRALIZERS <u>S-4</u>	<u>10</u>	
REGULATOR <u>LATCH DOWN BAFFLE</u>	<u>1</u>	<u>W</u>
TOP PLUG <u>LATCH DOWN</u>	<u>1</u>	
HEAD <u>CSG SWIVEL</u>	<u>1</u>	<u>C</u>
WAGNER <u>CEMENT BASKET</u>	<u>1</u>	
OTHER		<u>0</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>T. Broadfoot</u>	<u>420045</u>	<u>LIBERAL KS.</u>
<u>R. CRIST</u>	<u>52276</u>	<u>"</u>
<u>J. FROST</u>	<u>52827</u>	<u>HUGOTON KS.</u>
	<u>75496</u>	
	<u>69775</u>	<u>75237</u>

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB/GAL. °API
 DISPL. FLUID _____ DENSITY _____ LB/GAL. °API
 PROP. TYPE _____ SIZE _____ LB.
 PROP. TYPE _____ SIZE _____
 ACID TYPE _____ GAL. _____ %
 ACID TYPE _____ GAL. _____
 ACID TYPE _____ GAL. SEP 16 1998
 SURFACTANT TYPE _____ GAL. _____ IN
 NE AGENT TYPE _____
 FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN
 GELLING AGENT TYPE _____ GAL.-LB. _____ IN
 FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN
 BREAKER TYPE _____ GAL.-LB. _____ IN
 BLOCKING AGENT TYPE _____ GAL.-LB. _____
 PERFPAC BALLS TYPE _____ QTY. _____
 OTHER _____
 OTHER _____

DEPARTMENT CEMENT
 DESCRIPTION OF JOB CEMENT 4 1/2 LONG STRING
 JOB DONE THRU: TUBING CASING ANNULUS TBG/ANN
 CUSTOMER REPRESENTATIVE X
 HALLIBURTON OPERATOR J. Broadfoot COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL
<u>1</u>	<u>140</u>	<u>PREM</u>		<u>B</u>	<u>77%EA2-10%AKAD 322-14% D.AIR 15% SALT</u>	<u>1.30</u>	<u>15.8</u>

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____
 BREAKDOWN _____ MAXIMUM _____
 AVERAGE _____ FRACTURE GRADIENT _____
 SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____
 HYDRAULIC HORSEPOWER _____
 ORDERED _____ AVAILABLE _____ USED _____
 AVERAGE RATES IN BPM _____
 TREATING _____ DISPL. _____ OVERALL _____
 CEMENT LEFT IN PIPE _____
 FEET 40 REASON SHOE JT

PRESLUSH: BBL. GAL. 5-12-5 TYPE H₂O-SuperFLUSH-H₂O
 LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____
 TREATMENT: BBL. GAL. 8 DISPL: BBL. GAL. 50.3
 CEMENT SLURRY: BBL.-GAL. 32.4
 TOTAL VOLUME: BBL.-GAL. _____
 REMARKS MSDS GIVEN TO CO MAN
ROTATED ALL JOB - CIRCULATED GOOD
JOB WELL DONE - NO ACCIDENT

CUSTOMER MURKIN DRILLING
 LEASE SANDY FEE
 WELL NO. _____
 JOB TYPE 4 1/2 LONG STRING
 DATE 1-11-12-96

JOB LOG HAL-2013-C

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
MURFIN ARUG.		SANDIFER	4 1/2 LONG STRING	881068

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1700							called out
	2330							READY 2400 ON LOC. - L.O.D.P
	0200							ORIGINAL
	0330							START CSG IN HOLE
	0345							HOOK UP TO CMT HEAD "NATIVE"
	0420							CONFIDENTIAL
	0423	3.0	5					START H ₂ O SPACER
	0425	3.0	12					START SUPER FLUSH
	0428	3.0	5					START H ₂ O SPACER
	0430	1.2	5			180		START CMT 15.8 GAL R.H.
	0434	4.6	27.4			200		SWITCH TO CMT DOWN HOLE
	0440	0	0			0		SHUT OFF WASHUP - DROP PLUG
	0444	3.7	40.4			0		START DISPLACEMENT H ₂ O
	0455	2	10			480		SLOW RATE - 50.4 TOTAL BBL
	0500	0	-			1200		PLUG LANDED - FLOAT HELD
								Job OVER
								THANKS FOR CALLING HALLIBURTON ENERGY SERVICES LIBERAL OIL.
								"HAVE A GOOD DAY"
								BLOODFOOT-CRIST - FROST
								MSDS GIVEN TO CO MAN
								ROTATED ALL OF JOB CIRCULATION GOOD
								Job Time 40min
								LOC TIME 6HR 30min.

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RELEASED
SEP 16 1998

FROM CONFIDENTIAL