

HALLIBURTON SERVICES
JOB LOG

WELL NO. #A-1 LEASE Hase/Aorst TICKET NO. 098481
 CUSTOMER MAI OPR PAGE NO. 1
 JOB TYPE Squeeze cement to surface. DATE 3-18-85

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
#1	0600							called out
	0745							on loc w/ 4 1/2 RTHs + RBP
	0815							Dresser Atlas on loc. to port @
	0915							Dresser stuck in hole 1542
	1105							out of hole w/ gun
	1115							start tools in hole on 2 3/8 tbg
						1000#		TRY to circ @ 2000' NO CIR.
								set RBP APPROX 2000' CIR hole closed
	1330							set RBP @ 3260' RTHs @ 3234'
						1500#		test plug. hold
			11.5					spot sand @ 3234'
	1420							start pulling tbg up to 1271'
2	1515					300#		set RTHs @ 1271' PSI on ANN
		1 1/2				600#		take inj. rate
	1530	-				500#		start 500 gal salt flush
	1542					550#		start 400 gal Floc-A-K 21 well circ @ 2000'
	1555	3	122			500#		st mix 450 SKs 50-50 P02 6 1/2 gal
								1/8" Floc-A-K 3/4% of 1% CIR-2.
	1637	3	14			450#		st mix 100 SKs 60 40 P02 2 1/2 gal
								1/8" Floc-A-K 3% CC
	1700							Fin mix wash up Pump + Line
						200#		st Disp. tbg cap 5 BBLs
						500#		Pump 3 BBLs
								wash up Pump + Line
	1725					500#		3 1/2 BBLs out Loose 100# in 5 min
								Release to TRK come back
	1734					600#		4 BBLs out Loose 100# in 5 min
						600#		4 1/4 BBLs out Loose 100# in 3 min
	1745					600#		4 1/2 BBLs out Loose 100# in 5 min
								Release to TRK come back
						600#	350#	Pump total of 5 1/2 BBLs + shut in.
	1830							Knock Loose + Rank up
								cmr Didn't Not circ - Lost CIR.
								through out 4 1/2 in mixed APPROX
								450 SKs cmr before losing CIR.

CUSTOMER

CUSTOMER MAL OPER
 JOB TYPE Pull Rts + sg.

CASE NO. 2
 DATE 3-19-87

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1342							ONLOC. 3-19-85
	1300							Release + Pull Rts.
	1320							out of hole w/ Rts
	1345							Run temp survey
	1450							start in hole w/ Rts to Dr. cont.
	1500							start to drill cont
	1640					550"	550"	Drilled out PSI on sg. w/ mudbag
2	0745							ONLOC 3-20-85
								water on loc. Perf 450'
	0855							start 4/2 Rts in hole on 2 3/4" tag.
	0910					500"		set Rts @ 389 PSI on ANN
						500"		take inj rate "None" want break down
	0930							go back to camp For 100 gal 15% MCA Acid.
								Spot Acid over Perfs @ 452'
	1100					500"		set Rts @ 389 PSI on ANN
		2				550"		Break down + take inj rate = 2 Bbl m.u.
		2				500"		start 30 gal salt flush then w/ 2 Bbl F.W. ^{Hand}
		2				550"		start 25 gal Flochok-21 _{Flochok}
								St mix 150 sks HCL 1/4" Flow-Lp per sk.
	1125					1000"		w/ 60 sks mixed Form. Locked up
	1143							wash up Pump. TRK
	1151					1100"		PSI back on sg.
	1212							Release to Pump TRK. "DRY"
						500"		PSI on ANN.
	1216	3	10					Rev. out short way 10 BBL
						500"		PSI on ANN.
3	1230					1000"		PSI back on sg.
	1308					450"		Release PSI down to 450" + shut in at well

CUSTOMER

HALLIBURTON SERVICES
JOB LOG

WELL NO. W-1 LEASE HASELHORST TICKET NO. 098481
 CUSTOMER MAI OPERATION PAGE NO. 3
 JOB TYPE SQUEEZE DATE 3-21-85

FORM 1013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0900							ON LOC SET UP EQUIP & PLAN JOB DRESSER ATLAS RUNNING LOG & TO PERF RATE PERF @ 317' SWEDGE UP TO WELL PUMP DOWN 4 1/2" CSB GET CIRC TO SURFACE FROM BRACKER HEAD HOOK UP TO P.C. & MANIFOLD
	1140		22					START MIX CMT 100 SKS 60/40 P. 2.2% GEL 3% CC & FLOCCLE
							100	FINISH MIX CMT CMT RETURNS TO SURFACE RELEASE PLUG
			4 1/2					START DISP STOP W/ 3 1/2 BBL CMT
							400	CLOSE ANNULUS & PRESSURE UP RELEASE PRESSURE & DISP PLUG TO 292' BY S.M.L.
							300	CLOSE ANNULUS & PRESSURE UP PRESSURE BLEEDS DOWN TO 128 PSI
	1215						125	CLOSE IN @ MANIFOLD JOB COMPLETE
								NAD FULL RETURNS TO SURFACE CIRC CMT TO SURFACE — APPROX 25 SKS TO PIT —
								<i>Thanks M & crew</i>
			3-23-85					
	1000							ON LOC RIG RUNNING TBC IN 3250' (w/ 22 JTS VIT) HOOK UP & CIRC. WELL W/ OIL
	1115							RELEASE RBP @ 3260' (WELL HOLDING FLOW) & PULL PLUG OUT TO PIT WELL BACK ON PUMP

CUSTOMER

HALLIBURTON SERVICES
JOB SUMMARY

HALLIBURTON DIVISION
HALLIBURTON LOCATION

Wichita Ks
Hays Ks

BILLED ON TICKET NO. 098481

WELL DATA

FIELD West Libenthal SEC. 19 TWP. 16 RNG. 19 COUNTY Ellis STATE Ks

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING				4 1/2	GL		
LINER							
TUBING				2 7/8	GL		
OPEN HOLE							SHOTS/FT.
PERFORATIONS							
PERFORATIONS							
PERFORATIONS							

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD _____
PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD _____
COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____
PACKER TYPE _____ SET AT _____
BOTTOM HOLE TEMP. _____ PRESSURE _____
MISC. DATA _____ TOTAL DEPTH _____

JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>3-18-85</u>	DATE <u>3-18-85</u>	DATE <u>2-16-85</u>	DATE <u>3-23-85</u>
TIME <u>0600</u>	TIME <u>0945</u>	TIME <u>1110</u>	TIME <u>1330</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
A. WERTH	1006	
A. Gabre	33647	HAYS KS
G. Schmach	PT	
	2592	HAYS KS
P. Cash	0526	HAYS KS
B. Freeman	0520	HAYS KS
Lenny Dietel	2592 PT	HAYS KS
R. Herman		
L. Piracy	3703 BLK.	HAYS KS
M. Childers		
D. DUBERK	3472 PT	HAYS KS

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

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.-LB. _____ IN _____
FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN _____
BREAKER TYPE _____ GAL.-LB. _____ IN _____
BLOCKING AGENT TYPE _____ GAL.-LB. _____
PERFPAC BALLS TYPE _____ QTY. _____

DEPARTMENT TOOLS + CM
DESCRIPTION OF JOB Run 4 1/2 RHT + RBB + cont to surface

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

CUSTOMER REPRESENTATIVE X Allen Banger

HALLIBURTON OPERATOR A WERTH COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	420	50-50	A	Port	B	6% Gel 1% Flocc 3/4% CFR2	1.53	12.30
	100	60-40	A	Port	B	3/4% Gel 1% Flocc 1/3% CC	1.27	14.38
1-20-85	150	HLC	A	Port	B	1/4% Flocc 1% FRISKI	1.64	14.78
	100	60-40	A	Port	B	1% Flocc 1% FRISKI 3% CC	1.27	14.3

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____ PRESURUSH: BBL.-GAL. _____ TYPE _____
BREAKDOWN _____ MAXIMUM _____ LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____
AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. 4.9
SHUT-IN: INSTANT _____ 5-MIN. _____ 15-MIN. _____ CEMENT SLURRY: BBL.-GAL. 174
HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL.-GAL. _____
ORDERED _____ AVAILABLE _____ USED _____ REMARKS See Job Log & Charts
AVERAGE RATES IN BPM _____
TREATING _____ DISPL. _____ OVERALL _____
CEMENT LEFT IN PIPE _____
FEET _____ REASON _____

CUSTOMER

CUSTOMER NAME: MAI OPER
LEASEE: HASELHURST
WELL NO. 1
JOB TYPE: TUB & SQUEEZE
DATE: 3-18-85



A DIVISION OF HALLIBURTON COMPANY

TICKET

NO. **098481-9**

FORM 1906 R9

PAGE 1 OF 2 PAGES

WELL NO. - FARM OR LEASE NAME: **A-1 Haselhurst** COUNTY: **Ellis** DATE: **5-18-85**

CHARGE TO: **MAT OPE** STATE: **Ks** NITROGEN JOB: YES NO

ADDRESS: **Box 33** CITY, STATE, ZIP: **Russell Ks 67665**

OWNER: **SAME** CONTRACTOR: **2010K well ser.** TICKET TYPE (CHECK ONE): SERVICE SALES

SHIPPER/VIA: **TRUCK** FREIGHT CHARGES: PPD COLLECT

DELIVERED TO: **W. L. Hordahl** ORDER NO.: **3** REFERRAL LOCATION: **3** LOCATION: **1** HAYS KS

WELL TYPE: **Oil** WELL CATEGORY: **Old well** WELL PERMIT NO.: **459535**

DATE OF INVOICE: **5-18-85**

As consideration, the above-named customer agrees to pay Halliburton in accord with the rates and terms stated in Halliburton's current price list. Invoices payable NET by the 20th of the following month after date of invoice. Upon customer's default in payment, interest shall be added to the amount of the unpaid account. These terms and conditions shall be governed by the law of the state where services are performed or equipment or materials are furnished.

Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED HEREON. THE PRECEDING SENTENCE, Halliburton's liability and customer's obligation to pay for such products, supplies and materials in contract, tort, negligence or otherwise arising out of the sale or use of any of the foregoing services are performed or equipment or materials are furnished. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.

PRICE REFERENCE	SECONDARY REF OR PART NO.	L O C.	ACCOUNT	DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT
					QTY	MEAS	QTY	MEAS		
110-056				MILEAGE "BU"	3360	FT	5 1/2	IN	700.00	900.00
000-117				RRE	23	MI			7.10	48.30
009-124	009-019			Mileage 2592	1342	FT			832.00	837.00
158-099				Flood - K-21	400	Gal			1.50	600.00
112-730				OPER. Charge 3-20-85	1	HR			260.00	260.00
000-113				OPER. Charge 3-20-85	1	HR			260.00	260.00
009-134	009-019			OPER. Charge 3-20-85	1	HR			417.00	417.00
158-099	201-004			OPER. Charge 3-20-85	1	HR			1.50	225.00
210-002				OPER. Charge 3-20-85	100	Gal	15	0%	1.29	129.00
009-134	009-019			OPER. Charge 3-20-85	1/2	Gal			18.00	9.00
030-015				PUMP SERVICE 3-21-85	317	FT				382.14
112-730				SLW PLUGS	1	EA				31.00
				OPER SER CHG 3-23-85	1	DA				260.00

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO. **B-459538-459525**

WAS JOB SATISFACTORY? COMPLETED?

WAS OPERATION OF EQUIPMENT SATISFACTORY?

WAS PERFORMANCE OF PERSONNEL SATISFACTORY?

CUSTOMER OR HIS AGENT (PLEASE PRINT): **Alfred Barber**

CUSTOMER OR HIS AGENT (PLEASE PRINT): **Alfred Barber**

CUSTOMER OR HIS AGENT (SIGNATURE): **Alfred Barber**

HALLIBURTON OPERATOR: **M. Chapman**

CUSTOMER: **Alfred Barber**

TOTAL: **6037.82**

WE CERTIFY THAT THE FAIR LABOR STANDARDS ACT OF 1938, AS AMENDED HAS BEEN COMPLIED WITH IN THE PRODUCTION OF GOODS AND IN THIS CONTRACT TO SERVICES FURNISHED UNDER



BULK MATERIALS DELIVERY AND TICKET CONTINUATION

FOR INVOICE AND
TICKET NO. 098481

DATE 3-18-85	CUSTOMER ORDER NO.	WELL NO. AND FARM Haselhorst #1	COUNTY Rush	STATE Kansas
CHARGE TO Mai Operations		OWNER Same	CONTRACTOR No. B459528	
MAILING ADDRESS Box 33		DELIVERED FROM Hays, Kansas	LOCATION CODE 50325	PREPARED BY Kiekel
CITY & STATE Russell, Ks. 67665		DELIVERED TO Southwest Hays, Ks.	TRUCK NO. 0526-8940	RECEIVED BY A. WERTH

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE		DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT
		L	D		QTY.	MEAS.	QTY.	MEAS.		
				6% Gel / 450 2% Gel / 100 550 Cu.Ft. Pozmix Cement						
504-043		1B		Regular Portland	285				5.30	1510 50
506-105		1B		Pozmix *A*	265				2.61	691 65
506-121		1B		10sk Halliburton Gel @2%						N/C
507-277		1B		15sk Halliburton Gel @4%	450				.37	166 50
507-145		1B		CFR-2 Blended w/450	284#				3.70	1050 80
507-210		1B		Flocele Blended	69#				1.21	83 49
509-406		1B		Calcium Chloride Blended	3				25.75	77 25
509-968		1B		Salt Branulated in sack	500#				.073	36 50
510-222		1B		Sand 20/40 brady in sack	2				7.60	15 20
					Returned Mileage Charge	TOTAL WEIGHT	LOADED MILES	TON MILES		
					SERVICE CHARGE ON MATERIALS RETURNED			CU. FEET		
500-207		1B		SERVICE CHARGE				CU. FEET 566	.95	537 70
500-306		1B		Mileage Charge	50,193	25		627.412	.70	439 19
No. B 459528					CARRY FORWARD TO INVOICE			SUB-TOTAL		4,608 78

FORM 1911-R5 REV. 9-81

CUSTOMER