

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

API NO. 15- 163-23,225-0000 ORIGINAL

County ROOKS
C -E/2 - NE - NW Sec. 30 Twp. 10S Rge. 19 X W

4600 Feet from S/ (circle one) Line of Section
3000 Feet from E/ (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
 SE, (circle one)

Lease Name KELLER Well # 2

Field Name MARCOTTE

Producing Formation ARBUCKLE

Elevation: Ground 2233 KB 2238

Total Depth 3870 PBDT 3818

Amount of Surface Pipe Set and Cemented at 205 Feet

Multiple State Cementing Collar Used? Yes x No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from 1616

feet depth to SURFACE w/ 325 sx cmt.

Drilling Fluid Management Plan Alt II 9-21-93
(Data must be collected from the Reserve Pit)

Chloride content 6000 ppm Fluid Volume 4800 bbls

Dewatering method used ALLOW TO DRY

Location of fluid disposal if hauled offsite:

Operator Name _____

Lease Name _____

Quarter Sec. _____ Twp. _____ Rng. _____ W

County _____ Docket No. _____

Operator: License # 30287

Name: NORWOOD OIL COMPANY

Address 4969 WEST 6TH STREET

City/State/Zip GREELEY, CO 80634

Purchaser: FARMLAND

Operator Contact Person: ROB NORWOOD

Phone (303) 356-1559

Contractor: Name: EMPHASIS OIL OPERATIONS

License: 8241

Wellsite Geologist: JAMES L. STEIDLEY

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/Re-Entry: Oil well info as follows:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

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

6/2/93 6/7/93 8/6/93
Spud Date Date Reached TD Completion Date

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, 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 geological 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 President Date 8-20-93

Subscribed and sworn to before me this 20th day of 8-20-93, 1993.

Notary Public Susan Worth / Susan Worth

Date Commission Expires 10-19-95

County Adams, State of Colorado.

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 STATE Other (Specify) _____
AUG 25 1993
Form ACO-1 (7-91) 8-25-93
CONSERVATION DIVISION
Wichita, Kansas

Operator Name NORWOOD OIL COMPANY Lease Name KELLER Well # 2

Sec. 30 Twp. 10S Rge. 19
 East County ROOKS
 West

Instructions: Show important tops and base of formation 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.

<p>Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Attach Additional Sheets.)</p> <p>Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Submit Copy.)</p> <p>List All E. Logs Run: DUAL INDUCTION COMP DENSITY NEUTRON</p>	<p><input checked="" type="checkbox"/> Log Formation (Top), Depth and Datums <input type="checkbox"/> Sample</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;">Name</th> <th style="width:20%;">Top</th> <th style="width:20%;">Datum</th> </tr> </thead> <tbody> <tr> <td>TOPEKA</td> <td>3230</td> <td>-992</td> </tr> <tr> <td>HEEBNER</td> <td>3441</td> <td>-1203</td> </tr> <tr> <td>TORONTO</td> <td>3465</td> <td>-1227</td> </tr> <tr> <td>LANSING</td> <td>3482</td> <td>-1244</td> </tr> <tr> <td>CONGLOMERATE</td> <td>3738</td> <td>-1500</td> </tr> <tr> <td>SIMPSON SAND</td> <td>3789</td> <td>-1551</td> </tr> <tr> <td>ARBUCKLE</td> <td>3804</td> <td>-1566</td> </tr> </tbody> </table>	Name	Top	Datum	TOPEKA	3230	-992	HEEBNER	3441	-1203	TORONTO	3465	-1227	LANSING	3482	-1244	CONGLOMERATE	3738	-1500	SIMPSON SAND	3789	-1551	ARBUCKLE	3804	-1566
Name	Top	Datum																							
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CONGLOMERATE	3738	-1500																							
SIMPSON SAND	3789	-1551																							
ARBUCKLE	3804	-1566																							

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	12-1/4	8-5/8	20	205	60-40 POZ	140	2% GEL, 3% CC
PRODUCTION	7-7/8	5-1/2	14	3865	60-40-POZ	125	6% SALT, 3/4% H32

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input checked="" type="checkbox"/> Protect Casing	1616-0	HLC	275	6% GEL, 1/4# FLOCELE
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone	1616-0	COMMON	50	3% CC

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	3804-08	NONE	

TUBING RECORD		Size <u>2-7/8</u>	Set At <u>3801</u>	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or Inj. <u>8/6/93</u>			Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil <u>9</u> Bbls.	Gas	Mcf	Water <u>173</u> Bbls.	Gas-Oil Ratio	Gravity <u>32</u>

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: 3804-08

15-163-23225-0000

Operator Name NORWOOD OIL COMPANY

Lease Name KELLER Well # 2

Sec. 30 Twp. 10S Rge. 19

East

County ROOKS

West

DRILL STEM TEST #1

Interval tested: 3662-3713
Times tool opened: 30-30-60-60
Initial hydrostatic pressure: 1756
Initial flow pressures: 39-39
Initial shut-in pressure: 59
Final flow pressures: 39-39
Final shut-in pressure: 59
Final hydrostatic pressure: 1714
Bottom hole temperature: 108 °F
Recovery: 10' MUD

ORIGINAL

DRILL STEM TEST #2

Interval tested: 3683-3807
Times tool opened: 30-30-30-60
Initial hydrostatic pressure: 1948
Initial flow pressures: 103-177
Initial shut-in pressure: 1002
Final flow pressures: 183-233
Final shut-in pressure: 983
Final hydrostatic pressure: 1843
Bottom hole temperature: 110 °F
Recovery: 340' CGO; 92' HO & GCM

RECEIVED
STATE CORPORATION COMMISSION

AUG 25 1993

CONSERVATION DIVISION
Kansas

ORIGINAL

EMPHASIS OIL OPERATIONS
A Division of N-B Company, Inc.
P. O. BOX 506
RUSSELL, KS 67665

DRILLERS LOG

OPERATOR: Norwood Oil Company
4969 W. 6th Street
Greeley, CO 80634

CONTRACTOR: Emphasis Oil Operations
Box 506
Russell, KS 67665

LEASE: Keller

WELL #2

LOCATION: NW/4

API 15-163-23,225-0000

Section 30-10S-19W
Rooks County, Kansas

LOGGERS TOTAL DEPTH: 3868'

ROTARY TOTAL DEPTH: 3870'

ELEVATION: 2238' K.B.

COMMENCED: 6/2/93

COMPLETED: 6/8/93

CASING: 8-5/8" @ 205' w/140 sks cement
5-1/2" @ 3866' w/125 sks cement

STATUS: Oil Well

DEPTHS & FORMATIONS

(All measurements from K.B.)

Dakota Sand	645'	Sand & Shale	2278'
Shale	686'	Lime & Shale	2865'
Cedar Hills	1090'	Shale & Lime	3120'
Shale	1295'	Lime & Shale	3337'
Anhydrite	1624'	R.T.D.	3870'
Shale	1686'		
Lime & Shale	1935'		

STATE OF KANSAS)
) ss
COUNTY OF RUSSELL)

Kyle B. Branum, of Emphasis Oil Operations, states that the above and foregoing is a true and correct log of the above captioned well, to the best of his knowledge.

Kyle B. Branum
Kyle B. Branum

Subscribed and sworn to before me on June 9, 1993.

My commission expires: February 6, 1996.

GLEND A. R. TIFFIN
NOTARY PUBLIC
STATE OF KANSAS
MY APPT. EXPIRES 2-6-96

Glenda R. Tiffin
Glenda R. Tiffin, Notary Public

RECEIVED
STATE CORPORATION COMMISSION

AUG 25 1993
CONSERVATION DIVISION
Wichita, Kansas

LARSON ENGINEERING, INC.

CONSULTING PETROLEUM ENGINEERS

562 WEST HIGHWAY 4

OLMITZ, KS 67564-8561

ORIGINAL

(316) 653-7368

NORWOOD OIL COMPANY

Keller #2

App C E/2 NE NW Sec. 30-10S-19W

Rooks Co., Kansas

2238' KB

2233' GL

Completion Report - Run production casing

06-07-93 Cut 3870' 7-7/8" hole (driller's TD). RU ELI Wireline. Ran dual ind, comp density-neutron logs (logger's TD 3868'). Ran 96 jts used 5-1/2" 14# R-2 & R-3 ST&C 8rd csg. Tallied 3860.21', set @ 3865' KB, 4' off bottom, 32.70' shoe jt. Ran centralizers on 1st, 2nd, 3rd, 4th, 5th, 7th, 55th & 72nd collars (3832, 3790, 3751, 3729, 3687, 3606, 1645 & 982') and baskets on 54th, 55th & 73rd jts. RU Halliburton. Cmt w/ 20 bbl 2% KCl flush, 500 gal mud flush & 125 sx 60-40 poz w/ 6% salt, 3/4% H-322 & 7#/sk gilsonite. Rotated pipe. Good returns throughout. Landed plug @ 1000#, float held. Plug down @ 2:00 pm 6-8-93. Plugged rathole w/ 10 sx 60-40 poz. Set slips & released rig @ 2:45 pm 6-8-93.

RECEIVED
STATE CORPORATION COMMISSION

AUG 25 1993

CONSERVATION DIVISION
Wichita, Kansas



CHARGE TO: Norwood
 ADDRESS: _____
 CITY, STATE, ZIP CODE: _____

No. _____

TICKET: _____
 RECEIVED: _____
 COMMISSION: _____
 DATE: 5/19/93
 OWNER: _____
 STATE: _____

FORM 1908 R-12

1. <u>25525</u>	WELL/PROJECT NO. <u>#2</u>	LEASE <u>Keller</u>	COUNTY/PARISH <u>Roots</u>	STATE <u>KS</u>	CITY/OFFSHORE LOCATION	DATE <u>7-7-93</u>
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE	NITROGEN JOB? <input type="checkbox"/> YES <input type="checkbox"/> NO	CONTRACTOR <u>Co. Tools</u>	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO <u>Loc</u>
3.	<input type="checkbox"/> SALES					ORDER NO.
4.	WELL TYPE <u>01</u>	WELL CATEGORY <u>01</u>	JOB PURPOSE <u>095</u>	WELL PERMIT NO.	WELL LOCATION	

REFERRAL LOCATION: _____
 INVOICE INSTRUCTIONS: 20 CNT 25% Tools

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M	QTY.	U/M	UNIT PRICE	AMOUNT
		LOC	ACCT	DF									
000-117						MILEAGE	16	mi	1		2.15	441.00	
001-016						Pump Charge	1615	ft	1	ea	1105.00	1105.00	
030-018	403.15773 #23751					Tap Plug	1	ea	5/2 IN		65.00	65.00	
001-018						Add'l hours	3	ea			195.00	585.00	
100-115						Mileage	16	m			1.15	23.20	
110-042						DRBP	3300	ft	1	ea	1195.00	1195.00	

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

CUSTOMER OR CUSTOMER'S AGENT SIGNATURE: [Signature]
 DATE SIGNED: _____ TIME SIGNED: _____ A.M. P.M.

do do not require IPC (Instrument Protection). Not offered

SUB SURFACE SAFETY VALVE WAS: PULLED & RETURN PULLED RUN

TYPE LOCK	DEPTH	SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL
BEAN SIZE	SPACERS		OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
TYPE OF EQUALIZING SUB.	CASING PRESSURE	WE UNDERSTOOD AND MET YOUR NEEDS?				FROM CONTINUATION PAGE(S)
TUBING SIZE	TUBING PRESSURE	OUR SERVICE WAS PERFORMED WITHOUT DELAY?				2832 88
TUBING PRESSURE	WELL DEPTH	WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				
TREE CONNECTION	TYPE VALVE	ARE YOU SATISFIED WITH OUR SERVICE? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE
		<input checked="" type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				5850.00

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket

CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT)	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE)	HALLIBURTON OPERATOR/VEHICLE #	EMP #	HALLIBURTON APPROVAL
<u>Cliff R. "Rob" Norwood</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>47961</u>	<u>[Signature]</u>



HALLIBURTON
ENERGY SERVICES

TICKET CONTINUATION

ORIGINAL

TICKET No. 5/12/68

FORM 1911 R-8

CUSTOMER Norwood

WELL Keller #2

DATE 7-1-68

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT	
		LOC	ACCT	DF			QTY.	U/M	QTY.	U/M			
504-316		1		B		Halliburton Light Cement	275						
504-308	516.00261	1		B		Standard Cement	50				6.76	338.00	
509-406	890.50812	1		B		Calcium Chloride Blended W/Star	1				28.25	28.25	
507-210	890.50071	1		B		Flocele Blended W/HLC	69	1b			1.40	96.60	
510-222	516.00051	1		B		Sand 20/40 Brady onside	2				9.30	18.60	
500-207						SERVICE CHARGE							
										CUBIC FEET	333	1.25	416.25
500-306						MILEAGE CHARGE							
						TOTAL WEIGHT	29,799			LOADED MILES	16		
										TON MILES	238.392	85	202.63

CONTINUATION TOTAL 2,832.83

ORIGINAL

RECEIVED BY
 DIVISION
 DATE
 TIME
 SIGNATURE

JOB LOG FORM 2013 R-3

CUSTOMER		WELL NO.	LEASE	JOB TYPE		TICKET NO.	
Norwood Pet.		2	Keller	Block Squeeze		512126	
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS	PRESSURE (PSI) TUBING	CASING	DESCRIPTION OF OPERATION AND MATERIALS
	0845						ON LOC - Rig Swapping
	0900						Rig Broke Down
	1300						St. In hole w/ QRBP
	1400						Set @ 3300'
	1455						LOAD Hole w/ H ₂ O
	1510				500		Test BP - Holding
							SWAB DOWN
	1730		6				Drop 2s+ Sand
	1740		70			300	LOAD Hole
	1800						Perforate @ 1615'
	1830				300		Load hole & Break Circ
	1839		0		500		St. Mixing Cement
	1859		76		950		Drop Plug on Run
	1859		0		800		START DISP
	1909		38		1100		Plug Down - SLM - 1565'
							Circ. 12bbl Cement to P.T.
							Close IN
							WASH UP
							RACK UP
	2000						Job Complete
							Thank You
							Jim Reno

RECEIVED
STATE CORPORATION COMMISSION
AUG 25 1993
CONSERVATION DIVISION
Wichita, Kansas

WELL DATA

FIELD _____ SEC _____ TWP _____ RNG _____ COUNTY Rooks 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 QBSP SET AT _____

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	4		5 1/2			
LINER						
TUBING	4		2 7/8			
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>7-1</u>	DATE <u>7-1</u>	DATE <u>7-1</u>	DATE <u>7-2</u>
TIME <u>0530</u>	TIME <u>0845</u>	TIME <u>1900</u>	TIME <u>2000</u>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG <u>5W 5 1/2</u>	<u>1</u>	
HEAD <u>Cement</u>		
PACKER <u>QBSP</u>		
OTHER		

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>J Reno</u>	<u>40029 P4</u>	<u>25525</u>
<u>G. Bessing</u>	<u>3244 COMB</u>	<u>"</u>
<u>D Dobritz</u>	<u>Bulk</u>	<u>"</u>
<u>R. Kuhn</u>	<u>Bulk</u>	<u>"</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.-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 / Tools

DESCRIPTION OF JOB Block Squeeze

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

CUSTOMER REPRESENTATIVE X Tom Larson

HALLIBURTON OPERATOR J. Reno COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD. CU.FT./SK.	MIXED LBS./GAL.
<u>L</u>	<u>275</u>	<u>HCC</u>		<u>B</u>	<u>1/4H fibre</u>	<u>1.67</u>	<u>13.1</u>
<u>T</u>	<u>50</u>	<u>5TD</u>		<u>B</u>		<u>1.18</u>	<u>15.6</u>

PRESSURES IN PSI _____ SUMMARY _____ VOLUMES _____

CIRCULATING _____ DISPLACEMENT _____ PRES'LUSH: BBL.-GAL. _____ TYPE Self H2O

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

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. 38.16

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____ CEMENT SLURRY: BBL.-GAL. _____

HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL.-GAL. _____

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET 50 REASON Request

REMARKS

STATE RECEIVED
AUG 25 1993
CONSERVATION DIVISION
Wichita, Kansas

CUSTOMER: Norwood Pet.
LEASE: Keller
WELL NO: 2
JOB TYPE: Block Sg
DATE: 7-93

Phone 913-483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

Phone Plainville 913-434-2812
 Phone Ness City 913-798-3843

ORIGINAL

ALLIED CEMENTING CO., INC. 4136
 Home Office P. O. Box 31 Russell, Kansas 67665 64096

New

Date	6-2-93	Sec.	30	Twp.	10	Range	19	Called Out	1:45 PM	On Location	3:15 PM	Job Start	4:30 PM	Finish	5:00 PM	
Lease	KELLER	Well #	#2	Location				ZURICH 5s 24w 4s	County	ROOKS	State	KANSAS				

Contractor **EMPHASIS DRLG. RIG # 8**

Type Job **SURFACE**

Hole Size	12 1/4	T.D.	207'
Csg.	8 5/8 20#	Depth	205'
Tbg. Size		Depth	
Drill Pipe		Depth	
Tool		Depth	
Cement Left in Csg.	15'	Shoe Joint	
Press Max.		Minimum	
Meas Line		Displace	✓ 12 1/4 88L
Perf.			

Owner
 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 listed.

Charge To **NORWOOD OIL CO.**

Street **4969 WEST 6TH ST.**

City **Greeley** State **CO.** **80634**

The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No.

[Signature]

EQUIPMENT

Pumptrk #	No.	Cementer	<i>[Signature]</i>
Pumptrk #	177	Helper	<i>Will</i>
Pumptrk #		Cementer	
Pumptrk #		Helper	
Bulktrk #	213	Driver	<i>Jason</i>
Bulktrk #		Driver	

CEMENT

Amount Ordered **140**

SK. 6/40 27% GEL 3% CC

Consisting of

Common	84	575	483.00
Poz. Mix	5.6	300	168.00
Gel.	3	200	N/C
Chloride	4	2500	100.00
Quickset			

DEPTH of Job

Reference:	Pump TRUCK CHRG.	430.00
	235 Per mile 15m	33.75
	1-8 5/8 WOODEN PLUG	42.00
	Sub Total	505.75
	Tax	
	Total	

Handling	100	140.00
Mileage 15m	04	84.00
Sub Total		975.00
Total		

Remarks:

Cement Circulated

[Signature]

Floating Equipment

RECEIVED
 STATE CORPORATION COMMISSION
 AUG 25 1993
 CONSERVATION DIVISION
 Wichita, Kansas

HALLIBURTON SERVICES

Duncan, Oklahoma 73538

A Division of Halliburton Company

TICKET

NO. 340543-5

ORIGINAL

FORM 1906 R-11

WELL NO.—FARM OR LEASE NAME 2 Keller		COUNTY Rooks	STATE KS	CITY / OFFSHORE LOCATION	DATE 6-9-93
CHARGE TO Newwood Petroleum		OWNER Same		TICKET TYPE (CHECK ONE) SERVICE <input checked="" type="checkbox"/> SALES <input type="checkbox"/>	NITROGEN JOB YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ADDRESS		CONTRACTOR Empress		LOCATION 1 Haus KS	CODE 25525
CITY, STATE, ZIP		SHIPPED VIA	FREIGHT CHARGES <input type="checkbox"/> PPD <input type="checkbox"/> COLLECT	LOCATION 2	CODE
WELL TYPE 01	WELL CATEGORY 01	WELL PERMIT NO.	DELIVERED TO	LOCATION 3	CODE
TYPE AND PURPOSE OF JOB OSS		B-155407	ORDER NO.	REFERRAL LOCATION	

As consideration, the above-named Customer agrees to pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists. Invoices payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of 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 IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and customer's exclusive remedy in any cause of action (whether in contract, tort, product liability, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the customer of credit for the cost of such items. 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		
100-17				MILEAGE	17	mi			25	427.50
101-010				Pump Change	369	ft	1	KA		1345.00
120-08				Top Plug	1	KA	5	1/2 IN		65.00
213-009				Mud flush	500	gal			1.65	325.00
214-738				Ch Fix II	2	gal			21.50	43.00
12A	825205			Guide Shoe	1	KA	5	1/2 IN	63.00	121.00
110	80793022			Centralizer	2		5	1/2 IN	40.00	158.00
110	80793522			Fluidmator Centralizer	5		5	1/2 IN	63	315.00
24A	81519751			Insert float	1	KA				110.00
27	81519311			Run in tool	1	KA				110.00
320	80793522			Fluidmator Centralizer	5		5	1/2 IN	110.00	330.00
019-201				Mixing Head	1	KA				155.00

THIS IS NOT AN INVOICE

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO.

B- 155407

RECEIVED
STATE COMMISSION
AUG 25 1993
SUBSTANTIAL APPLICABLE TAXES WILL BE ADDED TO INVOICE
W/BE/MS/KANSAS

WAS JOB SATISFACTORILY COMPLETED? _____

WAS OPERATION OF EQUIPMENT SATISFACTORY? _____

WAS PERFORMANCE OF PERSONNEL SATISFACTORY? _____

X J.C. Larson
CUSTOMER OR HIS AGENT (PLEASE PRINT)

X J.C. Larson
CUSTOMER OR HIS AGENT (SIGNATURE)

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

[Signature]
HALLIBURTON OPERATOR

HALLIBURTON APPROVAL _____

CUSTOMER



HALLIBURTON SERVICES
Duncan, Oklahoma 73539

A Division of Halliburton Company

**BULK MATERIALS DELIVERY
AND
TICKET CONTINUATION**

FOR INVOICE AND
TICKET NO. 340543

DATE 6-8-93	CUSTOMER ORDER NO.	WELL NO. AND FARM #2 Keller	COUNTY Rooks	STATE Kansas
CHARGE TO Norwood Petroleum		OWNER Same;	CONTRACTOR Emphasis Drig.	
MAILING ADDRESS		DELIVERED FROM Hays, Ks.	LOCATION CODE 025525	No. B 155407
CITY & STATE		DELIVERED TO S/W Plainville, Ks.	TRUCK NO. 4604	
			PREPARED BY Becker	
			RECEIVED BY <i>T.C. Janson</i>	

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE		DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT
		L	D		QTY.	MEAS.	QTY.	MEAS.		
				135Cu.Ft.Pozmix Cmt. No Gel						
504-308	516.00261	1	B	Standard Cement	81				6.76	547 56
506-105	516.00286	1	B	Pozmix 'A'	3672	lb			.054	198 29
509-968	516.00158	1	B	Salt Blended	300	lb			.13	39 00
507-775	516.00144	1	B	Halad-322 Blended	79	lb			6.90	545 10
508-291	516.00337	1	B	Bilsonite Blended	900	lb			.40	360 00

THIS IS NOT AN INVOICE

			Returned Mileage Charge	TOTAL WEIGHT	LOADED MILES	TON MILES			
				SERVICE CHARGE ON MATERIALS RETURNED			CU. FEET		
500-207		1	B				175	1.25	
								218 75	
500-306		1	B	Mileage Charge	12,741	17	108.299	.85	
				TOTAL WEIGHT				2,000 75	
No. B 155407		CARRY FORWARD TO INVOICE				SUB-TOTAL			

STATE RECEIVED
AUG 25 1993
2,000 75
CONSERVATION DIVISION
Wichita, Kansas

ORIGINAL

ATTACH TO INVOICE & TICKET NO. 340543

FORM 1908 R-7

A Division of Halliburton Company

DISTRICT Hays, KS

DATE 6-9-93

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO: Norwood Petroleum (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. 2 LEASE Keller SEC. 30 TWP. 10S RANGE AW

FIELD _____ COUNTY Rooks STATE KS OWNED BY _____

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME _____ TYPE _____ FORMATION THICKNESS _____ FROM _____ TO _____ PACKER: TYPE _____ SET AT _____ TOTAL DEPTH _____ MUD WEIGHT _____ BORE HOLE _____ INITIAL PROD: OIL _____ BPD, H2O _____ BPD, GAS _____ MCF PRESENT PROD: OIL _____ BPD, H2O _____ BPD, GAS _____ MCF

Table with columns: NEW USED, WEIGHT, SIZE, FROM, TO, MAX. ALLOW. P.S.I. Rows include CASING, LINER, TUBING, OPEN HOLE, PERFORATIONS.

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED Cement 5/2 Prod. String w/ 1255 yds 6% SAH 7# GIL 0.758 HAWK 322

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

- As consideration, the above-named Customer agrees: THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED
a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price list.
b) To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies...
c) That because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the effectiveness of the products, supplies or materials...
d) That Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials.
e) That Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well...
f) To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
g) That this contract shall be governed by the law of the state where services are performed or materials are furnished.
h) That Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND AGREE THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT. SIGNED: J.C. Jarson DATE: 6-9-93 TIME: 0830 A.M. RECEIVED STATE CORPORATION COMMISSION AUG 25 1993 CONSERVATION DIVISION Wichita, Kansas

WELL DATA
 FIELD _____ SEC. 30 TWP. 10 RNG. 19W COUNTY Rooks 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 _____ SET AT _____
 BOTTOM HOLE TEMP. _____ PRESSURE _____
 MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	4	14	5/2	0	3869	
LINER						
TUBING						
OPEN HOLE			7 7/8	0		SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR <u>Ingot 5/2</u>	<u>1</u>	<u>HALCO</u>
FLOAT SHOE <u>Cement</u>	<u>1</u>	<u>"</u>
GUIDE SHOE <u>FLWD</u>		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>6-8</u>	DATE <u>6-8</u>	DATE <u>6-8</u>	DATE <u>6-8</u>
TIME <u>0015</u>	TIME <u>0530</u>	TIME <u>0530</u>	TIME

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.
 OTHER _____
 OTHER _____

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>J. Reno 49861</u>	<u>40029 A1</u>	<u>25528</u>
<u>G. Blessing 52160</u>	<u>3244 CUMB</u>	<u>"</u>
<u>D. Dobson 130022</u>	<u>4404 BIK</u>	<u>"</u>

DEPARTMENT Cement
 DESCRIPTION OF JOB Prod. Spring
 JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.
 CUSTOMER REPRESENTATIVE X Tom Larsen
 HALLIBURTON OPERATOR Jim Reno COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<u>1</u>	<u>125</u>	<u>WU/100</u>		<u>B</u>	<u>NOGAL 675ALF 746.6 0.75% HALAD 322 1120</u>		<u>19.7</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 32.70 REASON FLUAT

SUMMARY
 PRES LUSH BBL-GAL 20 TYPE Open 28
 LOAD & BKDN BBL-GAL 12 MUD LOSS PAD: BBL-GAL _____
 TREATMENT: BBL-GAL _____ DISPL: BBL-GAL 936
 CEMENT SLURRY: BBL-GAL 39
 TOTAL VOLUME: BBL-GAL _____

REMARKS
 RECEIVED STATE CORPORATION COMMISSION
 AUG 25 1993
 CONSERVATION DIVISION
 Wichita, Kansas

CUSTOMER
 Lease
 Kellers
 WELL NO.
 JOB TYPE
 DATE

HALLIBURTON SERVICES JOB LOG

WELL NO. 2 LEASE Keller TICKET NO. 310543
 CUSTOMER Norman Petroleum PAGE NO. 1
 JOB TYPE Prod. String DATE 6-8-93

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0830							ON LOC ORIGINAL
								St. Csg. in hole Bsk. 83 in.
	1140							1,234,5,7 BREAK CIRC. w/ Mud Hog
	1310	5	0				300	START Clayfil II - 18 bbl
	1314	5	12				300	START Mud Flush
	1333		2				-	Plug Ramrod w/ 105x
	1336	6	0				300	St. Cement - Begin Rotation
	1343	6	30				100	Finish Mixing
	1344						-	Drop Plug - Wash Pump & Lines
	1345	7	0				200	START Dip
	1355	7	92.7				1000	Plug-Down- Floor Head
								Job Complete Thank You Jim Ren

RECEIVED
 STATE CORPORATION COMMISSION
 AUG 25 1993
 CONSERVATION DIVISION
 Wichita, Kansas

CUSTOMER