

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

API NO. 15- 055212040000 **ORIGINAL**
County Finney
S/2 - NW - SE - SW Sec. 18 Twp. 21 Rge. 34 XX ^EW

Operator: License # 4779

950 Feet from S/N (circle one) Line of Section

Name: North American Resources Company

1650 Feet from E/W (circle one) Line of Section

Address 16 East Granite

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

City/State/Zip Butte, MT 59701

Lease Name Ruth Kester Well # 24-18

Purchaser: _____

Field Name Christabelle

Operator Contact Person: James L. Else

Producing Formation Morrow

Phone (406) 782-4233

Elevation: Ground 3039' KB 3034'

Contractor: Name: Abercrombie, RTD, Inc.

Total Depth 4950' PBDT 4889'

License: 30684

Amount of Surface Pipe Set and Cemented at 2200 Feet

Wellsite Geologist: Wes Hanson

Multiple Stage Cementing Collar Used? XX Yes _____ No

Designate Type of Completion
 New Well _____ Re-Entry _____ Workover _____

If yes, show depth set 3159 Feet

Oil _____ SVD _____ SIOW _____ Temp. Abd.
_____ Gas _____ ENHR _____ SIGW
_____ Dry _____ Other (Core, WSW, Expl., Cathodic, etc)

If Alternate II completion, cement circulated from 2200

feet depth to 3159 w/ 225 sx cmt.

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

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit) **9-22-93**

Operator: _____

Chloride content _____ ppm Fluid volume _____ bbls

Well Name: _____

Dewatering method used _____

Comp. Date _____ Old Total Depth _____

Location of fluid disposal if hauled offsite: _____

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

Operator Name _____

Lease Name _____ License No. _____

6/16/93 6/28/93 7/9/93
Spud Date Date Reached TD Completion Date

_____ Quarter Sec. _____ Twp. _____ S Rng. _____ E/W

County _____ Docket No. _____

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 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 MaryEllen Kloker

Title Engineering Intern Date 8/30/93

Subscribed and sworn to before me this 30th day of August, 19 93.

Notary Public J. D. O'Neil

Date Commission Expires May 24, 1994

K.C.C. OFFICE USE ONLY
F. Letter of Confidentiality Attached
C. Wireline Log Received
S. Section Report Received
STATE CORPORATION COMMISSION
Distribution
SEP 0 1993
SVD/Rep _____ NGPA
Plug _____ Other _____
(Specify)
CONSERVATION DIVISION
Wichita, Kansas

Operator Name North American Resources Company Lease Name Ruth Kester Well # 24-18

Sec. 18 Twp. 21 Rge. 334 East West county Finney

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 Yes No
(Attach Additional Sheets.)
Samples Sent to Geological Survey Yes No
Cores Taken Yes No
Electric Log Run Yes No
(Submit Copy.)

List All E.Logs Run: Formation Microscanner;
Compensated Neutron-Litho-Density; Dual
Induction- SFL; Borehole Compensated Sonic
Log; and Cement Bond Log

Name	Top	Datum
Base/Anhydrite	2159	887
Heebner	3875	-829
Lansing	3973	-927
Marmaton	4441	-1395
Pawnee	4533	-1487
Cherokee	4576	-1530
Atoka	4699	-1653
Morrow Sh.	4781	-1653
Morrow Sd.	4819	-1735
St. Genevieve	4837	-1791
St. Louis 'C'	4899	-1853

CASING RECORD <input type="checkbox"/> New <input checked="" 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"	24	2149'	light common	600 150	3% CC 2% gel 3%CC
Production	7 7/8"	5 1/2"	14	4934'	self stress	125	

ADDITIONAL CEMENTING/SQUEEZE RECORD					
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives	
<input checked="" type="checkbox"/> Perforate					
<input checked="" type="checkbox"/> Protect Casing	2200 3159	Premium Plus Light	225	3% CC + 1/4 # Flocele	
<input type="checkbox"/> Plug Back TD					
<input type="checkbox"/> Plug Off Zone		Premium Plus	50	2% 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
8 3	4818' - 4834'	10400# 20/40 sand + 9318 gal Boragel 4822 gals. gel wtr. flush

TUBING RECORD Size 2 3/8" Set At 4818' Facker At 4719' Liner Run Yes No

Date of First, Resumed Production, SMD or Inj. 7/26/93 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours Oil 18 Bbls. Gas 0 Mcf Water 48 Bbls. Gas-Oil Ratio .96 Gravity 37' API

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 4818-4834

TRILOBITE TESTING, L.L.C.

ORIGINAL

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

API #15-055-21204

Well Name RUTH KESTER #24-18 Test No. 1 Date 6/27/93
 Company NORTH AMERICAN RESOURCES COMPANY Zone MORROW/MISS
 Address 16 E GRANITE BUTTE MT 59701 Elevation 3046 KB
 Co. Rep./Geo. WES HANSEN Cont. ABERCROMBIE RIG #8 Est. Ft. of Pay 15
 Location: Sec. 18 Twp. 21S Rge. 34W Co. FINNEY State KS

Interval Tested 4770-4872 Drill Pipe Size 4.5" XH
 Anchor Length 102 Wt. Pipe I.D. - 2.7 Ft. Run 404
 Top Packer Depth 4765 Drill Collar - 2.25 Ft. Run _____
 Bottom Packer Depth 4770 Mud Wt. 9.1 lb/Gal.
 Total Depth 4872 Viscosity 53 Filtrate 10.4

Tool Open @ 7:50 AM Initial Blow WEAK BLOW SLOWLY BUILT TO 3"
 ISI: BLED OFF BLOW - NO RETURN
 Final Blow WEAK TO FAIR BLOW SLOWLY BUILT TO BOTTOM IN 30 MINUTES
 FSI: BLED OFF BLOW - NO RETURN

Recovery - Total Feet 390 Flush Tool? NO

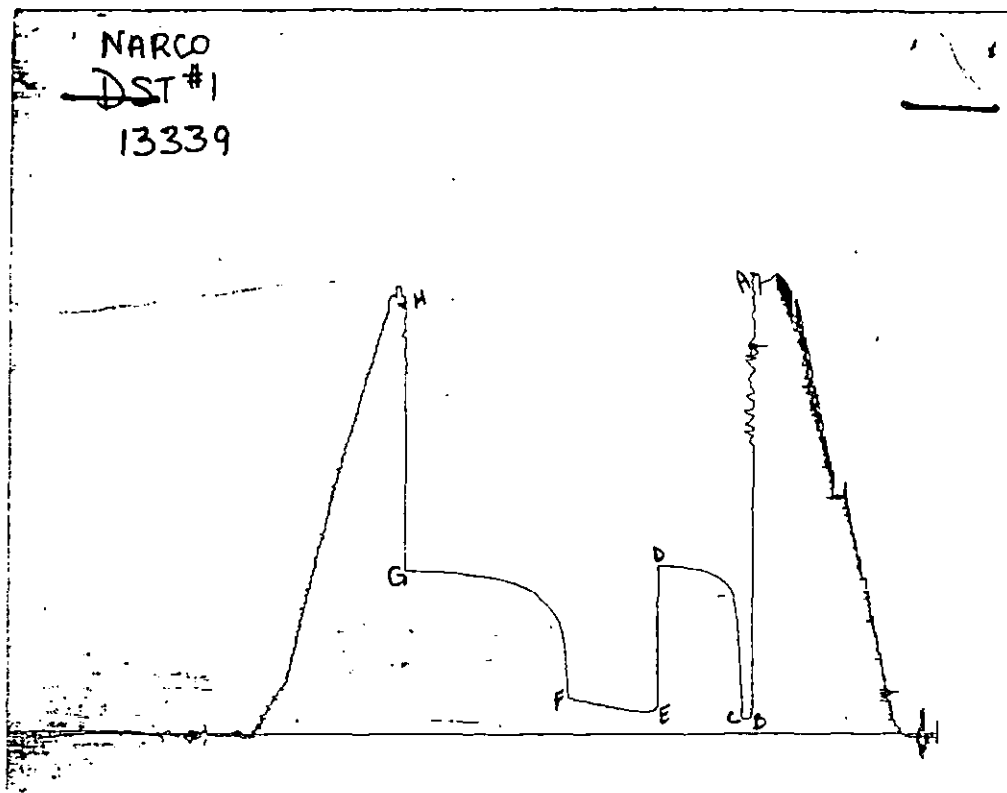
Rec. <u>40</u>	Feet of	<u>GAS IN PIPE ABOVE FLUID</u>
Rec. <u>30</u>	Feet of	<u>GSY OIL CUT MUD-15%GAS/25%OIL/60%MUD</u>
Rec. <u>180</u>	Feet of	<u>GSY OIL CUT MUD-30%GAS/15%OIL/55%MUD</u>
Rec. <u>120</u>	Feet of	<u>GSY OIL & WTR CUT MUD-25%GAS/15%OIL/20%WTR/40%MUD</u>
Rec. <u>60</u>	Feet of	<u>OIL CUT MUDDY WTR-10%OIL/60%WTR/30%MUD</u>

BHT 121 °F Gravity 39 °API 80 °F Corrected Gravity 37 °API
 RW 0.22 Chlorides 96 ppm Recovery Chlorides 22000 ppm System Chlorides 1500 ppm System

(A) Initial Hydrostatic Mud 2337.6 PSI AK1 Recorder No. 13309 Range 4700
 (B) First Initial Flow Pressure 90.4 PSI ● (depth) 4800 w / Clock No. 27573
 (C) First Final Flow Pressure 83.2 PSI AK1 Recorder No. 13339 Range 4025
 (D) Initial Shut-in Pressure 880.7 PSI ● (depth) 4867 w / Clock No. 17640
 (E) Second Initial Flow Pressure 134.1 PSI AK1 Recorder No. _____ Range _____
 (F) Second Final Flow Pressure 183.0 PSI ● (depth) _____ w / Clock No. _____
 (G) Final Shut-in Pressure 853.7 PSI Initial Opening _____ Final Flow 60
 (H) Final Hydrostatic Mud 2267.5 PSI Initial Shut-in _____ Final Shut-in 120

RECEIVED
 STATE CORPORATION COMMISSION
 SEP 03 1993
 CONSERVATION DIVISION
 Wichita, Kansas

Our Representative ROD STEINBRINK



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2323	2337.6
(B) FIRST INITIAL FLOW PRESSURE	83	90.4
(C) FIRST FINAL FLOW PRESSURE	83	83.2
(D) INITIAL CLOSED-IN PRESSURE	879	880.7
(E) SECOND INITIAL FLOW PRESSURE	124	134.1
(F) SECOND FINAL FLOW PRESSURE	197	183
(G) FINAL CLOSED-IN PRESSURE	859	853.7
(H) FINAL HYDROSTATIC MUD	2363	2267.5

ORIGINAL

COMPUTER OIL EVALUATION BY TRILOBITE TESTING, L.L.C.

NORTH AMERICAN RESOURCES COMPANY

RUTH KESTER #24-18

DST 1

18

21S

34W

FINNEY KS

API #15-055-21204

ELEVATION:	3046	KB	EST. PAY	15	FT
DATUM:	-1822		ZONE TESTED:	MORROW/MISS	
TEST INTERVAL:	4770-4872		TIME INTERVALS:	5-60-60-120	
RECORDER DEPTH:	4867		VISCOSITY:	5.97	CP
BOTTOM HOLE TEMP:	121		HOLE SIZE:	7.875	IN

CUBIC FEET OF GAS IN PIPE:	3				
TOTAL FEET OF RECOVERY:	390.00		CORRECTED PIPE FILLUP:	502.747	
TOTAL BARRELS OF RECOVERY:	2.73		CORR. BARRELS OF RECOVERY:	4.222	BBL
BARRELS IN DRILL PIPE:	0.00		API GRAVITY:	37	
BARRELS IN WEIGHT PIPE:	2.73		FLUID GRADIENT:	0.364	
BARRELS IN DRILL COLLARS:	0.00				
GAS OIL RATIO:	0.96		CU.FT/BBL		
BUBBLE POINT PRESSURE:	11				
UNCORRECTED INITIAL PRODUCTION:				60.48	BBL
INITIAL PRODUCTION CORRECTED TO FINAL FLOW PRESSURE:				93.52	BBL/DAY
INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:				30.923	

INITIAL SLOPE	1024.63	PSI/CYCL	FINAL SLOPE	164.10	PSI/CYCLE
INITIAL P*	916.32	PSI	FINAL P*	884.55	PSI

TRANSMISSIBILITY	92.67	(MD.-FT./CP.)
PERMEABILITY	36.89	(MD.)
INDICATED FLOW CAPACITY	553.41	(MD.FT)
PRODUCTIVITY INDEX	0.10	(BARREL/DAY/PSI)
DAMAGE RATIO	0.78	
RADIUS OF INVESTIGATION	48.97	(FT,)
POTENTIOMETRIC SURFACE	230.27	(FT.)
DRAWDOWN FACTOR	3.467	(%)

CALCULATED RECOVERY ANALYSIS

WEIGHT PIPE

ORIGINAL

DST #

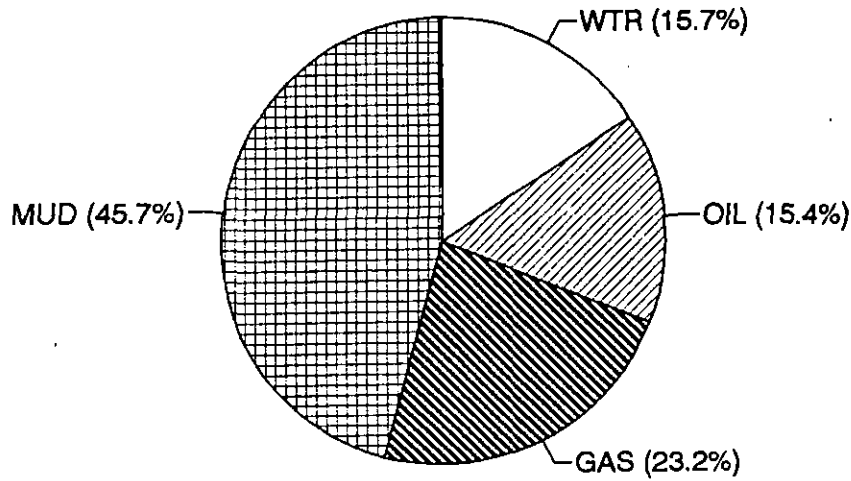
1

TICKET #

5946

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
1	30	15	4.5	25	7.5	0	0	60	18
2	180	30	54	15	27	0	0	50	90
3	120	25	30	15	18	20	24	40	48
4	60	0	0	10	6	60	36	30	18
5			0		0		0		0
TOTAL	390	22.69	88.5	15	58.5	15.385	60	44.615	174

	BBL OIL=	BBL WATER=	BBL MUD=	BBL GAS=	HRS OPEN	BBL/DAY
	0.4095	0.42	1.218	0.6195	1.08	9.1
	*	*				9.3333333



ORIGINAL

INITIAL FLOW

RECORDER 13339

DST # 1

TIME(MIN)	PRESSURE	<> PRESSURE
0	90.4	90.4
3	83.2	-7.2
6	83.2	0.0

FINAL FLOW

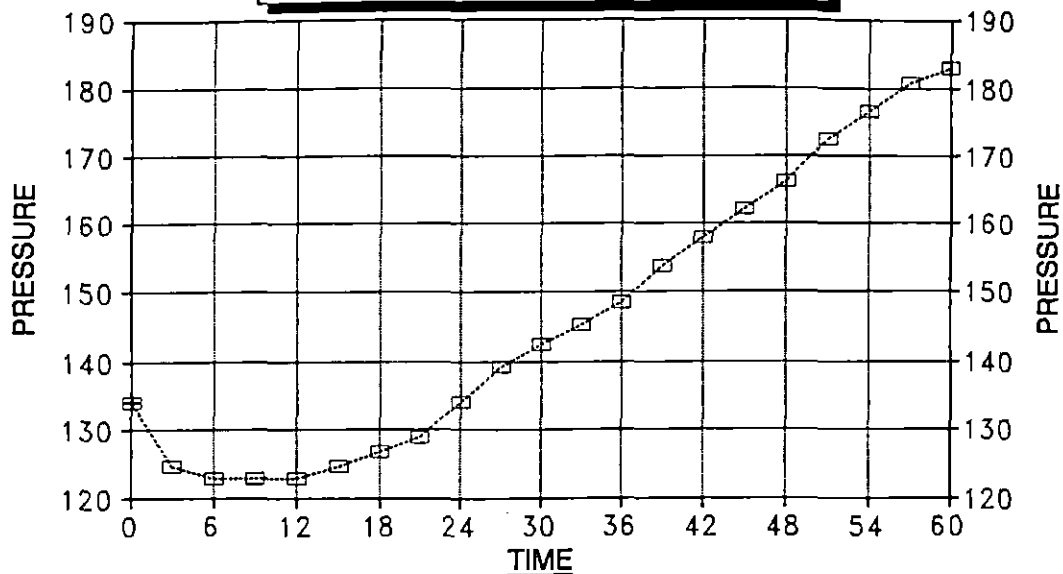
RECORDER 13339

DST # 1

TIME(MIN)	PRESSURE	<> PRESSURE
0	134.1	134.1
3	124.7	-9.4
6	122.7	-2.0
9	122.7	0.0
12	122.7	0.0
15	124.7	2.0
18	126.8	2.1
21	128.9	2.1
24	134.1	5.2
27	139.3	5.2
30	142.4	3.1
33	145.4	3.0
36	148.6	3.2
39	153.8	5.2
42	158.0	4.2
45	162.2	4.2
48	166.3	4.1
51	172.6	6.3
54	176.7	4.1
57	180.9	4.2
60	183.0	2.1

DELTA T DELTA P

FINAL FLOW / DST #1



---RUTH KESTER #24-18

INITIAL PRODUCTION CORRECTED TO PSEUDO STEADY FLOW STATE:

30.923

RUTH KESTER
INITIAL

DST #1
SHUTIN

ORIGINAL

5 INITIAL FLOW TIME SLOPE 1024.6 PSI/CYCLE
P* 916.32 PSI

		Log	<>		
	TIME(MIN)	Pws (psi)	Horn T	PRESSURE	Horn T
	3	376.3	0.426	376.3	3
	6	656.3	0.263	280.0	2
	9	743.4	0.192	87.1	2
	12	778.5	0.151	35.1	1
	15	799.6	0.125	21.1	1
	18	815.6	0.106	16.0	1
	21	829.6	0.093	14.0	1
	24	837.6	0.082	8.0	1
	27	848.7	0.074	11.1	1
	30	855.7	0.067	7.0	1
	33	861.7	0.061	6.0	1
	36	865.7	0.056	4.0	1
	39	867.7	0.052	2.0	1
	42	869.7	0.049	2.0	1
	45	871.7	0.046	2.0	1
	48	873.7	0.043	2.0	1
X	51	874.7	0.041	1.0	1
	54	876.7	0.038	2.0	1
	57	878.7	0.037	2.0	1
X	60	880.7	0.035	2.0	1

RUTH KESTER
FINAL

DST #1
SHUTIN
65 TOTAL FLOW TIME

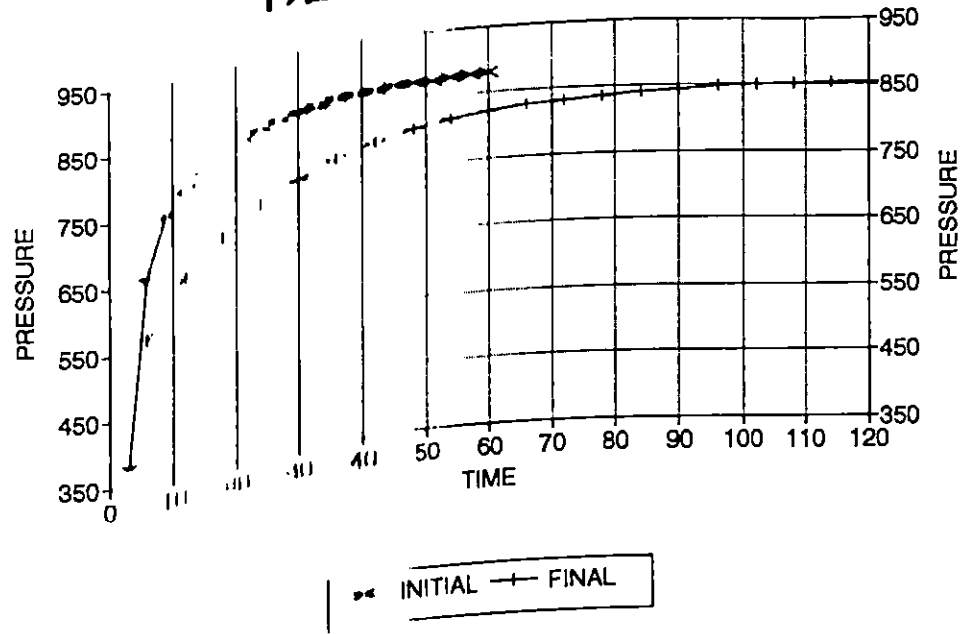
ORIGINAL

SLOPE 164.1 PSI/CYCLE
P* 884.5 PSI

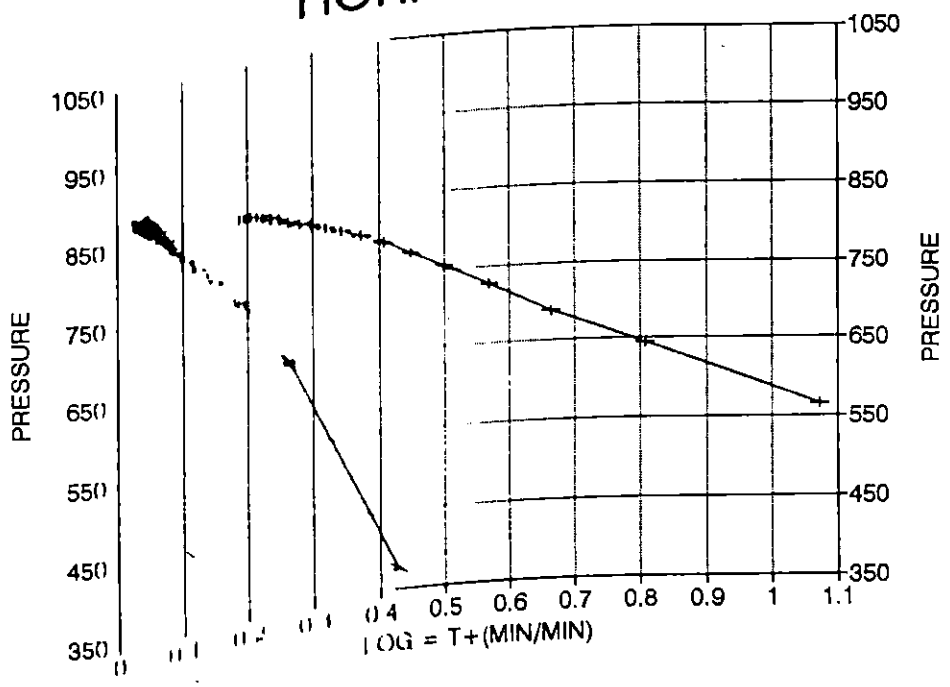
		Log	<>		
	Pws (psi)	Horn T	PRESSURE	Horn T	
	6	565.1	1.073	565.1	12
	12	645.3	0.807	80.2	6
	18	689.3	0.664	44.0	5
	24	727.4	0.569	38.1	4
	30	754.5	0.501	27.1	3
	36	774.5	0.448	20.0	3
	42	791.5	0.406	17.0	3
	48	803.6	0.372	12.1	2
	54	813.6	0.343	10.0	2
	60	821.6	0.319	8.0	2
	66	827.6	0.298	6.0	2
	72	831.6	0.279	4.0	2
	78	835.6	0.263	4.0	2
	84	840.6	0.249	5.0	2
	90	843.7	0.236	3.1	2
X	96	847.7	0.225	4.0	2
	102	850.7	0.214	3.0	2
	108	851.7	0.205	1.0	2
	114	852.7	0.196	1.0	2
X	120	853.7	0.188	1.0	2

ORIGINAL

RUIII KIPSTER #24-18 / DST #1 DELTA T DELTA P



HORNER PLOT



FLUID SAMPLER DATA

ORIGINAL

Ticket No.: 5946 Date: 6/27/93
 Company: NORTH AMERICAN RESOURCES COMPANY
 Lease: RUTH KESTER #24-18 Test No.: 1
 County: FINNEY Sec.: 18 Twp.: 21S Rng.: 34W

SAMPLER RECOVERY

Gas 300
 Oil 700
 Mud 3000
 Water
 Other
 Pressure 150
 TOTAL 4000

PIT MUD ANALYSIS

Chlorides 1500
 Resistivity ohms@ F
 Viscosity 53
 Mud Wt. 9.1
 Filtrate 10.4
 Other

SAMPLER ANALYSIS

Resistivity ohms@ F
 Chlorides ppm.
 Gravity 37 corrected @60F

PIPE RECOVERY

TOP

Resistivity ohms@ F
 Chlorides ppm

MIDDLE

Resistivity ohms@ F
 Chlorides ppm

BOTTOM

Resistivity 0.22 ohms@ 96 F
 Chlorides 22000 ppm

CEMENTING SERVICE REPORT



DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER **83-12-5344** DATE **4/27/93**
 STAGE **DS** DISTRICT **144203 K3**

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO. **Road Kester #24-18502 18-215-34** LOCATION (LEGAL) **18-215-34**
 FIELD-POOL **18-215-34** FORMATION

RIG NAME: **ABEACOMBIS**
 WELL DATA: BIT SIZE **7 7/8** CSG/Liner Size **5 1/2** BOTTOM TOP
 TOTAL DEPTH **144** WEIGHT **4234**
 ROT CABLE FOOTAGE
 MUD TYPE GRADE
 BHST BHCT THREAD
 MUD DENSITY LESS FOOTAGE SHOE JOINT(S) **45** TOTAL **119.3**
 MUD VISC. Disp. Capacity **4887**

COUNTY/PARISH **Finney** STATE **Kansas** API. NO.

NAME **WUCCO**
 AND
 ADDRESS

ZIP CODE
 SPECIAL INSTRUCTIONS

Float	TYPE	Float Collar	Stage Tool	TYPE	
	DEPTH	4887		DEPTH	
Shoe	TYPE	Int. Grade	Stage Tool	TYPE	
	DEPTH	4887 4234		DEPTH	

IS CASING/TUBING SECURED? YES NO
 LIFT PRESSURE PSI CASING WEIGHT - SURFACE AREA (3.14 x R²)
 PRESSURE LIMIT PSI BUMP PLUG TO **1500** PSI
 ROTATE RPM RECIPROCATE FT No. of Centralizers **6**

Head & Plugs TBG D.P. SQUEEZE JOB
 Double SIZE TOOL TYPE
 Single WEIGHT DEPTH
 Swage GRADE TAIL PIPE: SIZE DEPTH
 Knockoff THREAD TUBING VOLUME Bbls
 TOP NEW USED CASING VOL. BELOW TOOL Bbls
 BOT NEW USED DEPTH TOTAL Bbls
 ANNUAL VOLUME Bbls

JOB SCHEDULED FOR TIME: DATE: ARRIVE ON LOCATION TIME: **2345** DATE: **4/28/93** LEFT LOCATION TIME: **0430** DATE: **4/27/93**

TIME	PRESSURE		VOLUME PUMPED bbl		JOB SCHEDULED FOR			SERVICE LOG DETAIL		
	TBG OR D.P.	CASING	INCREMENT	CUM	INJECT RATE	FLUID TYPE	FLUID DENSITY			
0001 to 2400								PRE-JOB SAFETY MEETING		
0202	230		12		4	CW100		START CW100 W/SLURRY		
0206	230		34	12	6	CMT 14.5		START SELFSTRESS I		
0212	-		46		-			SELFSTRESS I PUMPED SHUT DN		
0214	-		46		-			Wash Pump + Lines		
0217	-		46		-	420		STOP TOP PLUG		
0217	-		119.3	46	6	420 8.34		START DISPLACEMENT		
0235	470		112		2			SLOW RATE		
0234	1500				2			Bump TOP Plug		
0236								CHECK FLOAT - Float Working		

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1.	125	1.54	SELFSTRESS I + 2% 31 + .5% D 60 + 1.1%				34	14.5
2.			12% D 46 + 5% 13K D 42 + 1.4% SE D 29					
3.								
4.								
5.								
6.								

BREAKDOWN FLUID TYPE VOLUME DENSITY PRESSURE MAX. **1500** MIN.
 HESITATION SQ. RUNNING SQ. CIRCULATION LOST YES NO Cement Circulated To Surf. YES NO Bbls.
 BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. **119** Bbls TYPE OIL STORAGE BRINE WATER
 GAS INJECTION WILDCAT
 Washed Thru Perfs YES NO TO FT. MEASURED DISPLACEMENT WIRELINE
 PERFORATIONS TO TO CUSTOMER REPRESENTATIVE **Robert Pearson** DS SUPERVISOR **Greg Gremie**

WELL DATA

FIELD 01 SEC 19 TWP. _____ RING _____ COUNTY FLAXY 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	MADE IN
CASING	U	14	5 1/2	0	3158	USA
LINEAR						
TUBING			2 3/8	0	3158	USA
OPEN HOLE						SHOTS/FT
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>7-10</u>	DATE <u>7-10</u>	DATE <u>7-10</u>	DATE <u>7-10</u>
TIME <u>0500</u>	TIME <u>0730</u>	TIME <u>0917</u>	TIME <u>1430</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>W. WILSON</u>	<u>89377</u>	<u>PICK UP</u>
	<u>39604</u>	<u>WESS CITY, KS</u>
	<u>COMBO</u>	
<u>M. GANTT</u>	<u>B1231</u>	<u>"</u>
	<u>5191</u>	
	<u>BULK</u>	
<u>K. MYERS</u>	<u>59018</u>	<u>HUGOTON, KS</u>
	<u>75817</u>	

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 HXL GAL. 200 % 15

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 1 GAL AQF-4, 1/2 GAL HA285M

OTHER _____

DEPARTMENT CEMENT

DESCRIPTION OF JOB CEMENT ANNULUS THROUGH
BASE PORT COLLAR &
PIVOT WELLS

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN

CUSTOMER REPRESENTATIVE X E. Pittman

HALLIBURTON OPERATOR Wayne With COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	<u>225</u>	<u>ALL PREMIUM PLUS</u>	<u>PLUS</u>	<u>B</u>	<u>370cc, 1/4 #/SK Floctite</u>	<u>2.12</u>	<u>12.2</u>
	<u>50</u>	<u>PREMIUM PLUS</u>	<u>PLUS</u>	<u>B</u>	<u>270cc</u>	<u>1.34</u>	<u>14.8</u>

PRESSURES IN PSI

SUMMARY

VOLUMES

CIRCULATING _____ DISPLACEMENT _____ PRESLUSH: BBL.-GAL. _____ TYPE _____

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

AVERAGE _____ FRACTURE GRADIENT _____ TREATMENT BBL. 5 DISPL. BBL. 11.2

SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____ CEMENT SLURRY BBL. 84.6 - 11.9 = 96.5

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

ORDERED _____ AVAILABLE _____ USED _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET 0' REASON _____

REMARKS

PORT COLLAR @ 3158'
PIVOT WELLS W/ AWD TUBING @ 4829'
DISPAC: W/ 270 VLL WATER

ADORN AMERICA'S RESOURCES LEASE ROTH KESTER
 WELL NO. 24-18
 JOB TYPE CEMENT ANNULUS
 DATE 7-10-93

ALLIED CEMENTING CO. INC. 5010

Home Office P. O. Box 31322, Kansas City, Missouri 64132

Date	6-19-93	Time	11:30 AM	Called On Location	2:00 PM	Job Start	2:00 PM	Job End	7:30 PM
Leas	(Kuth Kester)	Well No.	24-18	Location	Friend 10W-2S-1W-15-260	County	Finney	State	KS
Contractor	North Oils & Gas	Owner North Oils & Gas NARC							
Type Job	Surface	To Allied Cementing Co., Inc. North American Resources Co. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Hole Size	12 1/4	T.D.	2151	Charge To North American					
Csg.	8 5/8 289	Depth	2148	Street					
Tub. Size		Depth		City					
Drill Pipe		Depth		The above was done to satisfaction and supervision of owner agent or contractor.					
Tool		Depth		Purchase Order No.					
Cement Left in Csg.		Shoe Joint	42.70	X (Kuth Kester) 7/10/93					
Press Max.		Minimum		CEMENT					
Meas Line		Displace	131.47 bbls	Amount 600 sk 60/35 2261 3.4cc 19" Cellulose					
Perf.				Ordered 150 sk A 32cc 2361 4" Cellulose					

EQUIPMENT

Pumpjack	No.	Cementers	Fitz
	300	Helper	Telly
Pumpjack	No.	Cementers	
		Helper	
Bulktrk	No.	Driver	Steve
	309-310		
Bulktrk	No.	Driver	Walt
305			

DEPTH of Job

References:	1	8 5/8 Rubber Plug	
		Sub Total	
		Tax	
		Total	

Remarks:
 mix Load & Tail Cementer Release plug
 in the run & Displace To Insert
 Insert Did Hold
 Cement Did Circulate ✓
 Thank You
 Fitz & Crew

Consisting of	
Common	540 sks
Pos. Mix	210 sks
Gel.	34 sks
Chloride	25 sks
Quicks	
Cellulose	8 sks
Sales Tax	
Handling	
Mileage	
Sub Total	
Total	
Floating Equipment	
1- 8 5/8 TX Pattern Guide Shoe	
1- 8 5/8 Insert	
2- 5 7/8 Baskets	
1- 8 5/8 Centralizers	

AREA CODE 912 403-287

ALLIED CEMENTING COMPANY, INC.
P. O. BOX 31
RUSSELL, KANSAS 67665

ORIGINAL

TO: ^{PTD M.G.} ~~Abercrombie Drilling Co., Inc.~~
801 Union Center
Wichita, KS 67202

TURNKEY FOR NARCO
CANNOT BILL OUT
(971)

INVOICE NO. 64158
PURCHASE ORDER NO. _____
LEASE NAME Ruth Kester #24-16
DATE June 19, 1993

SERVICE AND MATERIALS AS FOLLOWS:

Common 150 sks @\$5.75	\$ 862.50	
Lite 600 sks @\$5.85	3,510.00	
Chloride 25 sks @\$25.00	625.00	
Celloflake 8 sks @\$1.10 per # (188#)	206.80 -	\$5,204.30

Handling 750 sks @\$1.00	750.00 ✓	
Mileage (50) @\$.04¢ per sk perm	1,500.00 ✓	
Surface	980.00	
Mi @\$2.25 pmptrk chg	112.50 -	
1 plug	83.00 -	3,425.50

JUN 2 1993

1 TX Pattern Guide Shoe-----	\$ 258.00	
1 Insert-----	360.00	
2 Baskets-----	305.00 ✓	
5 Centralizers-----		1,147.00

Total \$9,776.80

Cement circulated

Thank you!

All Prices Are Net, Payable 30 Days Following Date of Invoice. 1 1/2% Charged Thereafter.

1013256
9711000
UN4355

if account CURRENT 20% discount will be allowed ONLY if paid within 30 days of invoice.

Post-It™ brand fax transmittal memo 7671 # of pages 1

To: Mary Ellen	From: Mark Galyon
Co: NARCO	Co: Abercrombie
Dept:	Phone: 316-262-1841
Fax #: 406-496-5086	Fax #: