

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

API NO. 15- 007-22466-0000
County Barber
C .W2 . SE . SW Sec. 36 Twp. 34S Rge. 14W XXX ^E _W

Operator: License # 30972

660 Feet from Q (circle one) Line of Section

Name: Petroglyph Operating Company, Inc. 1650 Feet from E (circle one) Line of Section

Address P.O. Box 1839

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

City/State/Zip Hutchinson, KS 67504-1839

Lease Name Garten Well # 14-36

Purchaser: Kansas Gas Supply

Field Name Aetna

Operator Contact Person: Duane Purser

Producing Formation Mississippi

Phone (316) 665-8500

Elevation: Ground 1610' KB 1622'

Total Depth 4933' PBDT 4920'

Contractor: Name: _____

Amount of Surface Pipe Set and Cemented at 307' Feet

License: _____

Multiple Stage Cementing Collar Used? _____ Yes X No

Wellsite Geologist: Tom Williams

If yes, show depth set _____ Feet

Designate Type of Completion

X New Well _____ Re-Entry _____ Workover _____

If Alternate II completion, cement circulated from _____

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

feet depth to _____ w/ _____ sx cat.

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

Drilling Fluid Management Plan ACT 1 DPW
(Data must be collected from the Reserve Pit) 4-22-96

Operator: _____

Chloride content _____ ppm Fluid volume _____ bbls

Well Name: _____

Dewatering method used _____

Comp. Date _____ Old Total Depth _____

Location of fluid disposal if hauled offsite:

RELEASED

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. APR 22 1996

12-10-94 12-21-94 3-14-95
Spud Date Date Reached TD Completion Date

Quarter Sec. FROM CONFIDENTIAL ^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 Duane Purser

Title Manager of Operations Date 3-27-95

Subscribed and sworn to before me this 27th day of March 19 95

Notary Public Angela R. Ely

Date Commission Expires April 4, 1995

NOTARY PUBLIC - State of Kansas
ANGELA R. ELY
My Appt. Exp. 4-4-95

STATE CORPORATION COMMISSION
K.C.C. OFFICE USE ONLY
Letter of Confidentiality Attached
Wireline Log Received
Geologist Report Received
Distribution
SWD/Rep _____ NGPA _____
Plug _____ Other _____ (Specify)
MAR 29 1995
ANGELA R. ELY
STATE CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Operator Name Petroglyph Operating Company, Inc. Lease Name Garten Well # 14-36

Sec. 36 Twp. 34S Rge. 14W East County Barber
 West

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.) Log Formation (Top), Depth and Datum Sample Name Top Datum

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No (Submit Copy.)

List All E.Logs Run: See attached sheet.

CNL, DIL, CBL, ML

CASING RECORD New 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	14-3/4	10-3/4	32#	307'	common	240sx	
production	7-7/8	5-1/2	15.5#	4931'	light EA-2	120sx 125sx	10% CAL 10% SAH

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth		Type of Cement	#Sacks Used	Type and Percent Additives
	Top	Bottom			
<input type="checkbox"/> Perforate					
<input type="checkbox"/> Protect Casing					
<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
2 spf	4858' - 4868'	acid 1500 gal 15% FE
4 spf	4878' - 4888'	frac 93500# sand; 53895 gal frac fluid

TUBING RECORD

Size	Set At	Packer At	Liner Run
2-3/8"	4840'	none	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N.

Date of First, Resumed Production, SWD or Inj. 3-14-95 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	360	40		

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

METHOD OF COMPLETION

<input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perforated <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled	Production Interval
<input type="checkbox"/> Other (Specify)	4858'
	4888'

KB 1622

Sheet1

<u>Name of Zone</u>	<u>Depth Log</u>	<u>Subsea</u>
Chase	2154	-532
Towanda	2260	-638
Council Grove	2500	-878
Red Eagle	2848	-1226
Onaga Sh	2992	-1370
Wabaunse	3046	-1424
Stotler	3220	-1598
Tarkio	3256	-1634
Kanwaka Shale	3803	-2181
Heebner	4015	-2393
Douglas Shale	4074	-2452
Lansing	4099	-2477
Lansing "G"	4527	-2905
Swope	4650	-3028
Hertha	4681	-3059 Dst 1
Bkc	4732	-3110
Cherokee Sd	4824	-3202 Dst 2
Mississippian	4836	-3214 Dst 3
Rtd	4933	-3311
Ltd	4926	-3304

CONFIDENTIAL ORIGINAL

API#15-007-22466-0000

RELEASED

MAR 22 1996

FROM CONFIDENTIAL

RECEIVED
 STATE CORPORATION COMMISSION
 MAR 29 1995
 3-29-95
 CONSERVATION DIVISION
 MICHIGAN DEPARTMENT OF
 NATURAL RESOURCES

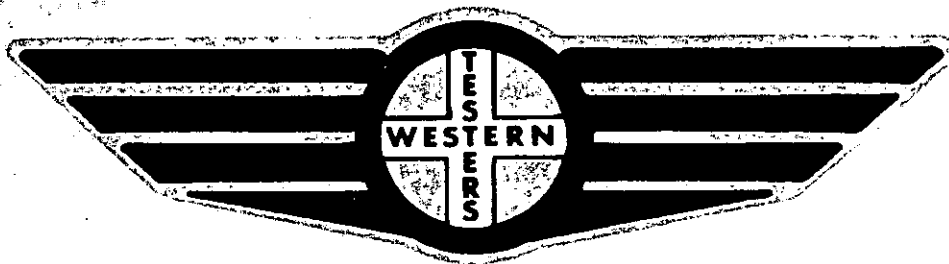
OPERATOR'S FILE COPY

WELL FILE ORIGINAL
FORMATION
TEST CONFIDENTIAL
REPORT

RELEASED

APR 22 1996

FROM CONFIDENTIAL



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

RECEIVED
STATE CORPORATION COMMISSION
MAR 29 1995
CONSOLIDATION DIVISION
WICHITA, KANSAS

API#15-007-22466

COMPANY PETROGILYPH OPERATING CO. INC. LEASE & WELL NO. #14-36 GARTEN SEC. 36 TWP. 34S RGE. 14W TEST NO. 1 DATE 12/17/94

DST REPORT

GENERAL INFORMATION

DATE : 12/17/94	TICKET : 20641
CUSTOMER : PETROGLYPH OPERATING CO.	LEASE : GARTEN
WELL : #14-36 TEST: 1	GEOLOGIST: WILLIAMS
ELEVATION: 1622KB	FORMATION: HERTHA
SECTION : 36	TOWNSHIP : 34S
RANGE : 14W COUNTY: BARBER	STATE : KS
GAUGE SN#: 1051 RANGE : 4250	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4687.00 ft	TO: 4692.00 ft	TVD: 4692.0 ft
DEPTH OF SELECTIVE ZONE:		TEST TYPE: GAS
DEPTH OF RECORDERS: 4688.0 ft	4689.0 ft	
TEMPERATURE: 110.0		
DRILL COLLAR LENGTH: 160.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH : 0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH : 4495.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 32.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 5.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE : 0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE : 7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH: 4682.0 ft	SIZE:	6.630 in
PACKER DEPTH: 4687.0 ft	SIZE:	6.630 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG #5	VISCOSITY : 49.00 cp
MUD TYPE : CHEMICAL	WATER LOSS: 13.600 cc
WEIGHT : 9.000 ppg	SERIAL NUMBER: 411
CHLORIDES : 3500 ppm	REVERSED OUT?: NO
JARS-MAKE : WTC	
DID WELL FLOW?: NO	

COMMENTS

Comment

INITIAL FLOW: STRONG BLOW.
 FINAL FLOW: STRONG BLOW.
 NO GAS TO SURFACE.

RELEASED

APR 22 1996

FROM CONFIDENTIAL

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	420 FEET GAS ABOVE FLUID
15.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	75.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	0.0738 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.0738 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2241.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	32.00	21.00
INITIAL SHUT-IN	45.00		622.00
FINAL FLOW	45.00	53.00	21.00
FINAL SHUT-IN	90.00		952.00

RELEASED

APR 22 1996

FINAL HYDROSTATIC PRESSURE: 2241.00

OFFICE TIME & PRESSURE INFORMATION

~~FROM CONFIDENTIAL~~

INITIAL HYDROSTATIC PRESSURE: 2248.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	38.00	24.00
INITIAL SHUT-IN	42.00		611.00
FINAL FLOW	45.00	48.00	35.00
FINAL SHUT-IN	90.00		945.00

FINAL HYDROSTATIC PRESSURE: 2225.00

CONFIDENTIAL

ORIGINAL

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 12/17/94
CUSTOMER : PETROGLYPH OPERATING CO.
WELL : #14-36 TEST: 1
ELEVATION: 1622KB
SECTION : 36
RANGE : 14W COUNTY: BARBER
GAUGE SN#: 1051 RANGE : 4250
TICKET : 20641
LEASE : GARTEN
GEOLOGIST: WILLIAMS
FORMATION: HERTHA
TOWNSHIP : 34S
STATE : KS
CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	38.00	38.00
5.00	38.00	0.00
10.00	33.00	-5.00
15.00	31.00	-2.00
20.00	27.00	-4.00
25.00	25.00	-2.00
30.00	24.00	-1.00

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APR 22 1996

FROM CONFIDENTIAL

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	53.00	53.00	0.00
6.00	119.00	66.00	0.00
9.00	181.00	62.00	0.00
12.00	229.00	48.00	0.00
15.00	268.00	39.00	0.00
18.00	306.00	38.00	0.00
21.00	350.00	44.00	0.00
24.00	390.00	40.00	0.00
27.00	431.00	41.00	0.00
30.00	466.00	35.00	0.00
33.00	501.00	35.00	0.00
36.00	535.00	34.00	0.00
39.00	566.00	31.00	0.00
42.00	611.00	45.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	48.00	48.00
5.00	48.00	0.00
10.00	48.00	0.00
15.00	47.00	-1.00
20.00	44.00	-3.00
25.00	41.00	-3.00
30.00	37.00	-4.00
35.00	35.00	-2.00
40.00	35.00	0.00
45.00	35.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	41.00	41.00	0.00
6.00	67.00	26.00	0.00
9.00	95.00	28.00	0.00
12.00	114.00	19.00	0.00
15.00	129.00	15.00	0.00
18.00	143.00	14.00	0.00
21.00	160.00	17.00	0.00
24.00	186.00	26.00	0.00
27.00	212.00	26.00	0.00
30.00	250.00	38.00	0.00
33.00	288.00	38.00	0.00
36.00	330.00	42.00	0.00
39.00	372.00	42.00	0.00
42.00	412.00	40.00	0.00
45.00	452.00	40.00	0.00
48.00	488.00	36.00	0.00
51.00	524.00	36.00	0.00
54.00	564.00	40.00	0.00
57.00	604.00	40.00	0.00
60.00	648.00	44.00	0.00
63.00	691.00	43.00	0.00
66.00	725.00	34.00	0.00
69.00	756.00	31.00	0.00
72.00	785.00	29.00	0.00
75.00	814.00	29.00	0.00
78.00	842.00	28.00	0.00
81.00	870.00	28.00	0.00
84.00	894.00	24.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
87.00	918.00	24.00	0.00
90.00	945.00	27.00	0.00

CONFIDENTIAL

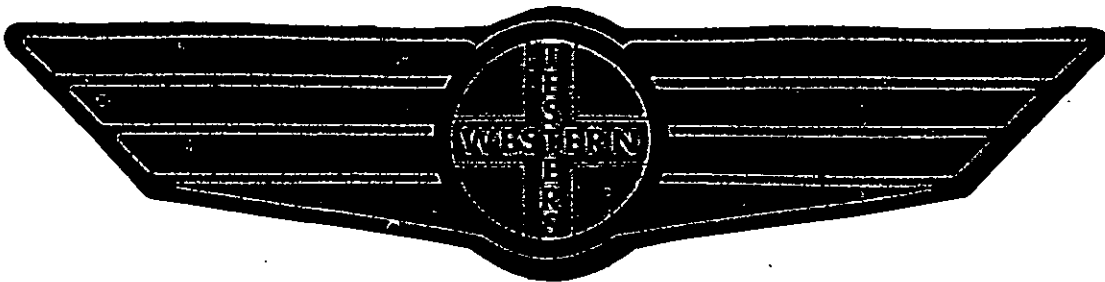
ORIGINAL

FORMATION TEST REPORT

RELEASED

APR 22 1996

FROM CONFIDENTIAL



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1-800-688-7021

COMPANY PETROGLYPH OPERATING CO., INC. LEASE & WELL NO.

#14-36 GARTEN

SEC. 36

TWP. 34S

RGE. 14W

TEST NO. 2

DATE

2/18/94

API# 15-007-22466

RECEIVED
STATE CORPORATION COMMISSION
MAR 29 1995
CONSOLIDATION DIVISION
WICHITA, KANSAS

FROM CONFIDENTIAL

GENERAL INFORMATION

DATE : 12/18/94	TICKET : 20642
CUSTOMER : PETROGLYPH OPERATING CO.	LEASE : GARTEN
WELL : #14-36 TEST: 2	GEOLOGIST: WILLIAMS
ELEVATION: 1622KB	FORMATION: CHEROKEE SAND
SECTION : 36	TOWNSHIP : 34S
RANGE : 14W COUNTY: BARBER	STATE : KS
GAUGE SN#: 1051 RANGE : 4250	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4812.00 ft TO: 4832.00 ft TVD: 4832.0 ft
 DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
 DEPTH OF RECORDERS: 4825.0 ft 4828.0 ft
 TEMPERATURE: 120.0

DRILL COLLAR LENGTH: 160.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH : 0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH : 4624.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 28.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 20.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE : 0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE : 7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH: 4807.0 ft	SIZE:	6.630 in
PACKER DEPTH: 4812.0 ft	SIZE:	6.630 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG #5	VISCOSITY : 44.00 cp
MUD TYPE : CHEMICAL	WATER LOSS: 13.200 cc
WEIGHT : 9.100 ppg	SERIAL NUMBER: 411
CHLORIDES : 4000 ppm	REVERSED OUT?: NO
JARS-MAKE : WTC	
DID WELL FLOW?: NO	

COMMENTS

Comment

INITIAL FLOW: STRONG BLOW IN 10 MINUTES.
 FINAL FLOW: STRONG BLOW.
 GAS TO SURFACE 10 MINUTES INTO FINAL SHUT-IN.

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ORIGINAL

DST REPORT (CONTINUED)

RELEASED

ADD 2-2 1996

FLUID RECOVERY

FROM CONFIDENTIAL

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
270.0	0.0	5.0	0.0	95.0	THIN GAS CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	90.0000	min.
GAS VOLUME:	0.6541	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	2.2132	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	2.2132	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2294.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	86.00	53.00
INITIAL SHUT-IN	60.00		86.00
FINAL FLOW	60.00	86.00	86.00
FINAL SHUT-IN	120.00		107.00

FINAL HYDROSTATIC PRESSURE: 2294.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2316.00

Description	Duration	p1	p End
INITIAL FLOW	25.00	91.00	60.00
INITIAL SHUT-IN	60.00		82.00
FINAL FLOW	65.00	82.00	82.00
FINAL SHUT-IN	123.00		119.00

FINAL HYDROSTATIC PRESSURE: 2316.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 12/18/94	TICKET : 20642
CUSTOMER : PETROGLYPH OPERATING CO.	LEASE : GARTEN
WELL : #14-36 TEST: 2	GEOLOGIST: WILLIAMS
ELEVATION: 1622KB	FORMATION: CHEROKEE SAND
SECTION : 36	TOWNSHIP : 34S
RANGE : 14W COUNTY: BARBER	STATE : KS
GAUGE SN#: 1051 RANGE : 4250	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	91.00	91.00
5.00	80.00	-11.00
10.00	74.00	-6.00
15.00	69.00	-5.00
20.00	63.00	-6.00
25.00	60.00	-3.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	70.00	70.00	0.00
6.00	76.00	6.00	0.00
9.00	80.00	4.00	0.00
12.00	82.00	2.00	0.00
15.00	82.00	0.00	0.00
18.00	82.00	0.00	0.00
21.00	82.00	0.00	0.00
24.00	82.00	0.00	0.00
27.00	82.00	0.00	0.00
30.00	82.00	0.00	0.00
33.00	82.00	0.00	0.00
36.00	82.00	0.00	0.00
39.00	82.00	0.00	0.00
42.00	82.00	0.00	0.00
45.00	82.00	0.00	0.00
48.00	82.00	0.00	0.00
51.00	82.00	0.00	0.00
54.00	82.00	0.00	0.00
57.00	82.00	0.00	0.00
60.00	82.00	0.00	0.00

CONFIDENTIAL

ORIGINAL

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	82.00	82.00
5.00	82.00	0.00
10.00	82.00	0.00
15.00	82.00	0.00
20.00	82.00	0.00
25.00	82.00	0.00
30.00	82.00	0.00
35.00	82.00	0.00
40.00	82.00	0.00
45.00	82.00	0.00
50.00	82.00	0.00
55.00	82.00	0.00
60.00	82.00	0.00
65.00	82.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	98.00	98.00	0.00
6.00	105.00	7.00	0.00
9.00	110.00	5.00	0.00
12.00	113.00	3.00	0.00
15.00	115.00	2.00	0.00
18.00	117.00	2.00	0.00
21.00	119.00	2.00	0.00
24.00	119.00	0.00	0.00
27.00	119.00	0.00	0.00
30.00	119.00	0.00	0.00
33.00	119.00	0.00	0.00
36.00	119.00	0.00	0.00
39.00	119.00	0.00	0.00
42.00	119.00	0.00	0.00
45.00	119.00	0.00	0.00
48.00	119.00	0.00	0.00
51.00	119.00	0.00	0.00
54.00	119.00	0.00	0.00
57.00	119.00	0.00	0.00
60.00	119.00	0.00	0.00
63.00	119.00	0.00	0.00
66.00	119.00	0.00	0.00
69.00	119.00	0.00	0.00
72.00	119.00	0.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
75.00	119.00	0.00	0.00
78.00	119.00	0.00	0.00
81.00	119.00	0.00	0.00
84.00	119.00	0.00	0.00
87.00	119.00	0.00	0.00
90.00	119.00	0.00	0.00
93.00	119.00	0.00	0.00
96.00	119.00	0.00	0.00
99.00	119.00	0.00	0.00
102.00	119.00	0.00	0.00
105.00	119.00	0.00	0.00
108.00	119.00	0.00	0.00
111.00	119.00	0.00	0.00
114.00	119.00	0.00	0.00
117.00	119.00	0.00	0.00
120.00	119.00	0.00	0.00
123.00	119.00	0.00	0.00

CONFIDENTIAL

ORIGINAL

FORMATION

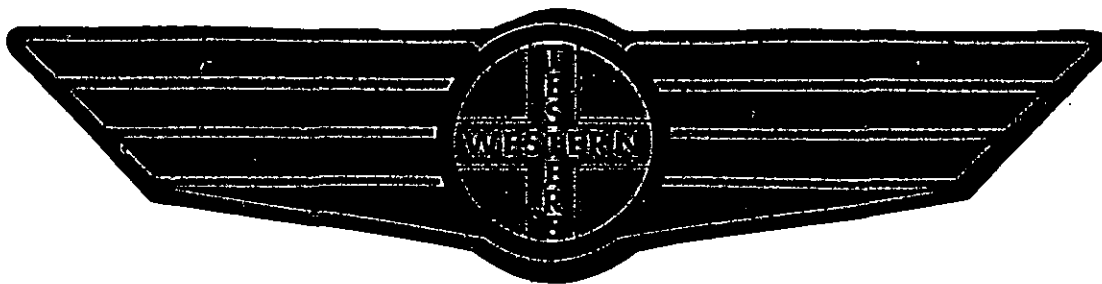
RELEASED

APR 22 1996

FROM CONFIDENTIAL

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 316-800-688-7021

COMPANY PETROGLYPH OPERATING CO., INC. LEASE & WELL NO. #14-36 GARTEN SEC. 36 TWP. 34S RGE. 14W TEST NO. 3 DATE 12/19/94

API#15-007-22466

CONFIDENTIAL

ORIGINAL

DST REPORT RELEASED

APR 22 1996

GENERAL INFORMATION

DATE : 12/19/94	TICKET : 20643	FROM CONFIDENTIAL
CUSTOMER : PETROGLYPH OPERATING CO.	LEASE : GARTEN	
WELL : #14-36 TEST: 3	GEOLOGIST: WILLIAMS	
ELEVATION: 1622KB	FORMATION: MISSISSIPPI	
SECTION : 36	TOWNSHIP : 34S	
RANGE : 14W COUNTY: BARBER	STATE : KS	
GAUGE SN#: 4332 RANGE : 4200	CLOCK : 12	

WELL INFORMATION

PERFORATION INTERVAL FROM: 4848.00 ft TO: 4883.00 ft TVD: 4883.0 ft
 DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
 DEPTH OF RECORDERS: 4872.0 ft 4875.0 ft
 TEMPERATURE: 122.0

DRILL COLLAR LENGTH: 160.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH : 0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH : 4654.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 28.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 41.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE : 0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE : 7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH: 4837.0 ft	SIZE:	6.630 in
PACKER DEPTH: 4842.0 ft	SIZE:	6.630 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG #5	VISCOSITY :	49.00 cp
MUD TYPE, : CHEMICAL	WATER LOSS:	7.600 cc
WEIGHT : 8.800 ppg	SERIAL NUMBER: 411	
CHLORIDES : 1000 ppm	REVERSED OUT?: NO	
JARS-MAKE : WTC		
DID WELL FLOW?: NO		

COMMENTS

Comment

INITIAL FLOW: WEAK BLOW BUILDING TO A 5 INCH BLOW.
 FINAL FLOW: STRONG BLOW.
 NO GAS TO SURFACE.

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

INSIDE CLOCK STOPPED, OUTSIDE CHART WAS READ.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	700 FEET GAS ABOVE FLUID
40.0	2.0	7.0	0.0	91.0	SLI GAS AND OIL CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0039 STB	TOTAL FLOW TIME:	95.0000 min.
GAS VOLUME:	0.0773 SCF	AVERAGE OIL RATE:	2.7728 STB/D
MUD VOLUME:	0.1790 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.1829 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2240.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	75.00	75.00
INITIAL SHUT-IN	60.00		216.00
FINAL FLOW	60.00	86.00	86.00
FINAL SHUT-IN	120.00		912.00

FINAL HYDROSTATIC PRESSURE: 2240.00

CONFIDENTIAL

ORIGINAL

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2263.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	76.00	76.00
INITIAL SHUT-IN	57.00		200.00
FINAL FLOW	65.00	76.00	76.00
FINAL SHUT-IN	120.00		907.00

FINAL HYDROSTATIC PRESSURE: 2263.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 12/19/94	TICKET : 20643
CUSTOMER : PETROGLYPH OPERATING CO.	LEASE : GARTEN
WELL : #14-36 TEST: 3	GEOLOGIST: WILLIAMS
ELEVATION: 1622KB	FORMATION: MISSISSIPI
SECTION : 36	TOWNSHIP : 34S
RANGE : 14W COUNTY: BARBER	STATE : KS
GAUGE SN#: 4332 RANGE : 4200	CLOCK : 12

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	76.00	76.00
5.00	76.00	0.00
10.00	76.00	0.00
15.00	76.00	0.00
20.00	76.00	0.00
25.00	76.00	0.00
30.00	76.00	0.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	76.00	76.00	0.00
6.00	79.00	3.00	0.00
9.00	83.00	4.00	0.00
12.00	93.00	10.00	0.00
15.00	102.00	9.00	0.00
18.00	111.00	9.00	0.00
21.00	122.00	11.00	0.00
24.00	127.00	5.00	0.00
27.00	133.00	6.00	0.00
30.00	139.00	6.00	0.00
33.00	145.00	6.00	0.00
36.00	153.00	8.00	0.00
39.00	159.00	6.00	0.00
42.00	167.00	8.00	0.00
45.00	175.00	8.00	0.00
48.00	184.00	9.00	0.00
51.00	195.00	11.00	0.00
54.00	198.00	3.00	0.00
57.00	200.00	2.00	0.00

CONFIDENTIAL

ORIGINAL

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	76.00	76.00
5.00	76.00	0.00
10.00	76.00	0.00
15.00	76.00	0.00
20.00	76.00	0.00
25.00	76.00	0.00
30.00	76.00	0.00
35.00	76.00	0.00
40.00	76.00	0.00
45.00	76.00	0.00
50.00	76.00	0.00
55.00	76.00	0.00
60.00	76.00	0.00
65.00	76.00	0.00

RELEASED

APR 22 1996

FROM CONFIDENTIAL

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	84.00	84.00	0.00
6.00	97.00	13.00	0.00
9.00	113.00	16.00	0.00
12.00	132.00	19.00	0.00
15.00	154.00	22.00	0.00
18.00	176.00	22.00	0.00
21.00	203.00	27.00	0.00
24.00	230.00	27.00	0.00
27.00	253.00	23.00	0.00
30.00	276.00	23.00	0.00
33.00	298.00	22.00	0.00
36.00	320.00	22.00	0.00
39.00	336.00	16.00	0.00
42.00	353.00	17.00	0.00
45.00	377.00	24.00	0.00
48.00	400.00	23.00	0.00
51.00	422.00	22.00	0.00
54.00	445.00	23.00	0.00
57.00	465.00	20.00	0.00
60.00	485.00	20.00	0.00
63.00	515.00	30.00	0.00
66.00	546.00	31.00	0.00
69.00	561.00	15.00	0.00
72.00	576.00	15.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
75.00	600.00	24.00	0.00
78.00	624.00	24.00	0.00
81.00	646.00	22.00	0.00
84.00	667.00	21.00	0.00
87.00	682.00	15.00	0.00
90.00	702.00	20.00	0.00
93.00	726.00	24.00	0.00
96.00	747.00	21.00	0.00
99.00	768.00	21.00	0.00
102.00	790.00	22.00	0.00
105.00	809.00	19.00	0.00
108.00	829.00	20.00	0.00
111.00	847.00	18.00	0.00
114.00	866.00	19.00	0.00
117.00	888.00	22.00	0.00
120.00	907.00	19.00	0.00

CUSTOMER COPY

REMIT TO:
P.O. BOX 951046
DALLAS, TX 75395-1046



HALLIBURTON

INVOICE

CONFIDENTIAL

ORIGINAL

INVOICE NO.	DATE
741370	12/11/1994

WELL/LEASE NO./PROJECT		WELL/PROJECT LOCATION		STATE	OWNER
GARTEN 14-36		BARBER		KS	SAME
SERVICE LOCATION	CONTRACTOR		JOB PURPOSE		TICKET DATE
PRATT	DUKE DRILLING		CEMENT SURFACE CASING		12/11/1994
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
681840	JOE LEVINGSTON			COMPANY TRUCK	8208

PETROGLYPH OPERATING CO., INC.
P O BOX 1839
HUTCHINSON, KS 67504-1839

DIRECT CORRESPONDENCE TO:
OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2000
OKLAHOMA CITY, OK 73102-5601

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
PRICING AREA - MID CONTINENT					
000-117	MILEAGE CEMENTING ROUND TRIP	74	MI	2.75	203.50
		1	UNT		
001-016	CEMENTING CASING	307	FT	630.00	630.00
		1	UNT		
030-503	WOODEN PLUG	10	3/4 IN	115.00	115.00
		1	EA		
001-018	CEMENTING CASING - ADD HRS	4	HR	235.00	940.00
		1	UNT		
504-136	CEMENT - 40/60 POZMIX STANDARD	240	SK	6.57	1,576.80
509-406	ANHYDROUS CALCIUM CHLORIDE	6	SK	36.75	220.50
500-207	BULK SERVICE CHARGE	252	CFT	1.35	340.20
500-306	MILEAGE CMTG MAT DEL OR RETURN	387.4825	TMI	.95	368.11

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MAR 3 1995
STRE CORPORATION COMMISSION
CC-3-574-10N-DIVISION
WICHITA, KANSAS

RELEASED

INVOICE SUBTOTAL

APR 22 1996

4,394.11

DISCOUNT - (BID)

878.82

INVOICE BID AMOUNT

FROM CONFIDENTIAL

3,515.29

*-KANSAS STATE SALES TAX
*-PRATT COUNTY SALES TAX

98.22
20.03

(Signature)

11211 1230 0006 3633.54

Surface

INVOICE TOTAL - PLEASE PAY THIS AMOUNT =====> \$3,633.54

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

INVOICE



CONFIDENTIAL

ORIGINAL

INVOICE NO.	DATE
741581	12/20/1994

WELL/LEASE NO./PROJECT	WELL/PROJECT/LOCATION	STATE	OWNER		
ARTEN 14-36	BARBER	KS	SAME		
SERVICE/LOCATION	CONTRACTOR	JOB/PURPOSE	TICKET/DATE		
RATT	DUKE DRILLING CO	CEMENT PRODUCTION CASING	12/20/1994		
ACCT. NO.	CUSTOMER/AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
31840	DUANE PURSER			COMPANY TRUCK	82710

DIRECT CORRESPONDENCE TO:

PETROGLYPH OPERATING CO., INC.
P O BOX 1839
HUTCHINSON, KS 67504-1839

OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2000
OKLAHOMA CITY, OK 73102-5601

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
000-117	MILEAGE CEMENTING ROUND TRIP	70 MI		2.75	192.50
		1 UNT			
001-016	CEMENTING CASING	4933 FT		1,765.00	1,765.00
		1 UNT			
030-016	CEMENTING PLUG SW ALUM TOP	5 1/2 IN		60.00	60.00
		1 EA			
018-317	SUPER FLUSH	10 SK		100.00	1,000.00
014-163	CLAYFIX II	2 GAL		24.00	48.00
02A	GUIDE SHOE - 5 1/2" 8RD THD.	1 EA		121.00	121.00
825.205					
04A	INSERT FLOAT VALVE - 5 1/2" 8RD	1 EA		110.00	110.00
815.19251					
07	FILL-UP UNIT 5 1/2" 6 5/8"	1 EA		55.00	55.00
815.19313					
06	WIPER-RECIPROCATING WALL CLEAN	10 EA		27.50	275.00
806.71230					
00	CENTRALIZER-5-1/2" 1/2" 1335	10 EA		44.00	440.00
806.60022					
001-018	CEMENTING CASING - ADD HRS	3 HR		235.00	N/C
		1 UNT			
004-316	CEMENT - HALL. LIGHT STANDARD	125 SK		7.37	921.25
007-210	FLOCELE	31 LB		1.65	51.15
004-308	CEMENT - STANDARD	125 SK		7.82	977.50
008-291	GILSONITE BULK	625 LB		.40	250.00
009-968	SALT	650 LB		.15	97.50
008-127	CAL SEAL 60	12 SK		25.90	310.80
007-775	HALAD-322	88 LB		7.00	616.00
000-207	BULK SERVICE CHARGE	288 CFT		1.35	388.80
000-306	MILEAGE CMTG MAT DEL OR RETURN	447.755 TMI		.95	425.37
INVOICE SUBTOTAL					8,104.87

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

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COPY

VOICE

CONFIDENTIAL



HALLIBURTON ORIGINAL

INVOICE NO.	DATE
741581	12/20/1994

WELL/LEASE NO./PROJECT	WELL/PROJECT LOCATION	STATE	OWNER		
RTEN 14-36	BARBER	KS	SAME		
SERVICE LOCATION	CONTRACTOR	JOB/PURPOSE	TICKET DATE		
ATT	DUKE DRILLING CO	CEMENT PRODUCTION CASING	12/20/1994		
CCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
1840	DUANE PURSER			COMPANY TRUCK	82710

PETROGLYPH OPERATING CO., INC.
 P O BOX 1839
 HUTCHINSON, KS 67504-1839

DIRECT CORRESPONDENCE TO:
 OKLAHOMA TOWER
 210 WEST PARK AVENUE
 SUITE 2000
 OKLAHOMA CITY, OK 73102-5601

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
	DISCOUNT - (BID)				1,783.05-
	INVOICE BID AMOUNT				6,321.82
	*-KANSAS STATE SALES TAX				191.17
	*-PRATT COUNTY SALES TAX				39.01
<p style="text-align: center;">RELEASED APR 22 1996 FROM CONFIDENTIAL</p> <p><i>Alu 12.29</i> <i>11/2-11 1935 0030 6552.00</i></p>					
INVOICE TOTAL - PLEASE PAY THIS AMOUNT					\$6,552.00

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 not 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 amount plus all collection and court costs.

RECEIVED DEC 23 1994