

ORIGINAL

CONFIDENTIAL

RELEASED

JUL 0 2 1991

SIDE ONE

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

API NO. 15- 077-21,207-00-00 FROM CONFIDENTIAL

County Harper

C NE NE Sec. 13 Twp. 31S Rge. 7 xx East West

4620 Ft. North from Southeast Corner of Section

660 Ft. West from Southeast Corner of Section  
(NOTE: Locate well in section plat below.)

Lease Name Troyer-Mast Well # 1

Field Name Goheen

Producing Formation Douglas sand

Elevation: Ground 1506 KB 1512

Total Depth 4775 PBDT 4268

Operator: License # 30319

Name: McRae & Henry, Ltd

Address 730 17th Street,  
Suite 920

City/State/Zip Denver, Colorado 80202

Purchaser: Peoples Natural Gas Co

Operator Contact Person: Mac Jones

Phone (303) 623-5999

Contractor: Name: Brandt Drilling Co

License: 5840

Wellsite Geologist: Harvey C. Young

Designate Type of Completion  
 New Well  Re-Entry  Workover

Oil  SWD  Temp. Abd.  
 Gas  Inj  Delayed Comp.  
 Dry  Other (Core, Water Supply, etc.)

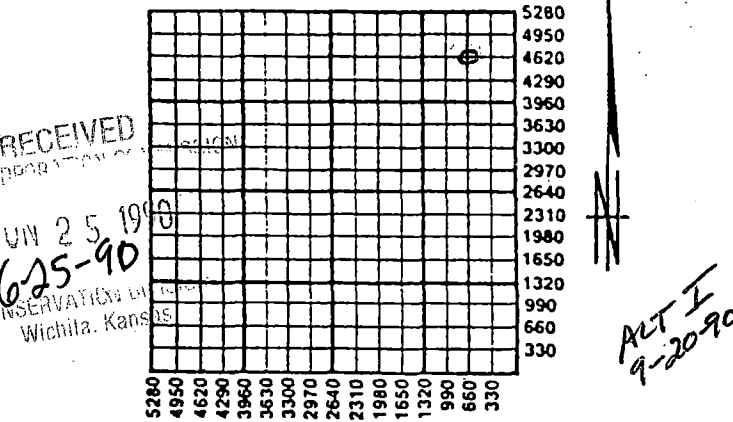
If OWMO: old well info as follows:  
Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Comp. Date \_\_\_\_\_ Old Total Depth \_\_\_\_\_

Drilling Method:  
 Mud Rotary  Air Rotary  Cable

4/1/90 4/16/90 4/21/90  
Spud Date Date Reached TD Completion Date



Amount of Surface Pipe Set and Cemented at 356 Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from \_\_\_\_\_

feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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 drillers time log 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. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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 Mac Jones

Title president Date 4/21/90

Subscribed and sworn to before me this 21st day of June, 19 90.

Notary Public Kimberley Smith

Date Commission Expires December 4, 1993

K.C.C. OFFICE USE ONLY  
 Letter of Confidentiality Attached  
 Wireline Log Received  
 Drillers Timelog Received

Distribution  
 KCC  SWD/Rep  NGPA  
 KGS  Plug  Other (Specify)  
NP 69013

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**SIDE TWO**

Operator Name McRae & Henry Ltd Lease Name Troyer Mast Well # 1  
 Sec. 13 Twp. 31S Rge. 7  East County Harper  
 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.)  
 Samples Sent to Geological Survey  Yes  No  
 Cores Taken  Yes  No  
 Electric Log Run  Yes  No  
 (Submit Copy.)

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Log  Sample

Name	Top	Bottom
Heebner	3228	
Douglas sand	3508	3521
LKC	3774	
Miss	4326	
Chattanooga	4692	
Simpson	4727	

**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
Surf	12 1/4	8 5/8	24	356	60-40 poz	160	See ticket
Production	7 7/8	4 1/2	10.5	4399	50-50 poz	250	See ticket

**PERFORATION RECORD**

**Acid, Fracture, Shot, Cement Squeeze Record**  
 (Amount and Kind of Material Used) Depth

Shots Per Foot	Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2	3510-14	None	

**TUBING RECORD**

Size 2 3/8 Set At 3468 Packer At 3468 Liner Run  Yes  No

Date of First Production PL Conn pending Producing Method  Flowing  Pumping  Gas Lift  Other (Explain)

Estimated Production Per 24 Hours  
 Oil Bbls. Gas Mcf Water Bbls. Gas-Oil Ratio Gravity  
AOF 5737 (4 pt--one point to follow after hookup)

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

**METHOD OF COMPLETION** Production Interval

Open Hole  Perforation  Dually Completed  Commingled  
 Other (Specify) \_\_\_\_\_

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McRae # Henry #1 Troyer-Mast  
NE/NE 13-31S-7W Harper County, Kansas  
Attachment to ACO-1, Well History

DST RECORD

DST #1 2992-3073 30-60-30-60. Recovered 120' SGCM, 480' Salt Water.  
SIP 1260-125 psi  
FP 85-210/275-305  
HP 1405-1395  
BHT 118° F

DST #2 4312-33 Mis-run: No packer seat

DST #3 4317-33 Mis-run: No packer seat

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RECEIVED  
STATE CORPORATION COMMISSION

JUN 25 1990

CONSERVATION DIVISION  
Wichita, Kansas

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

**CONFIDENTIAL**

APR 07 '90

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

**ORIGINAL**

**ALLIED CEMENTING CO., INC.**

No 6884

Home Office P. O. Box 31

Russell, Kansas 67665

New

Date	H-4-90	Sec.	13	Twp.	31	Range	7	Called Out		On Location	9:15 am	Job Start	3:15 p.m.	Finish	11:00 p.m.
Lease	Trayer	Well No.	1	Location	Dugain	-2 1/2 E-35, E.L.			County	Harper	State	KS			
Contractor	Gas-Well Serv.														
Type Job	Surface Casings														
Hole Size	12 1/4		T.D.	366											
Csg.	8 5/8 24 1/2		Depth	356											
Tbg. Size															
Drill Pipe															
Tool															
Cement Left in Csg.	20'		Shoe Joint												
Press Max.															
Meas Line	Displace <input checked="" type="checkbox"/>														
Perf.															

Owner ~~XXXXXXXXXX~~  
 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 Bandt Drilling Co. Inc  
 Street 200 W. Douglas Suite 700  
 City Wichita State Ks. 67201  
 The above was done to satisfaction and supervision of owner agent or contractor

Purchase Order No. \_\_\_\_\_  
 X Ida M. Freeman  
**CEMENT**

**EQUIPMENT**

#	No.	Cementor	
Pumptrk	20	Helper	Allen
		Helper	Brad
Pumptrk		Cementor	
		Helper	
Bulktrk	# 101	Driver	Mike H.
Bulktrk		Driver	

Amount Ordered	160 ST 1/40	2 & 3
Consisting of		
Common	96	5.00 480.00
Poz. Mix	64	2.25 144.00
Gel.	3	6.75 NIC
Chloride	5	20.00 100.00
Quickset		

<b>DEPTH of Job</b>	
Reference:	
	Pump-trk Chg. 360.00
	Pump trk. mileage 41.00
	1 8 5/8 Plus 40.00
	56' at .39 Tax 21.84
	<b>Total 462.84</b>

Handling	160	90	144.00
Mileage	41		196.80
Sub Total			
<b>Total</b>			<b>1064.80</b>

Remarks: Cement Did Circ  
 Plug was 160' down

Thank you!

Floating Equipment

**TOTAL \$ 1527.64**  
 Disc 305.53

# 1222

MAY 2 1990

**WELL DATA**

FIELD \_\_\_\_\_ SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RNG. \_\_\_\_\_ COUNTY HARPER 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 4775'

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	<u>150</u>	<u>10.5<sup>2</sup></u>	<u>4 1/2'</u>	<u>KB</u>	<u>4405</u>	
LINER		<u>11.6</u>				
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

**JOB DATA**

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>4-17</u>	DATE <u>4-18</u>	DATE <u>4-18</u>	DATE <u>4-18</u>
TIME <u>2:30</u>	TIME <u>0:30</u>	TIME <u>0:05</u>	TIME <u>0:00</u>

**TOOLS AND ACCESSORIES**

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR <u>4 1/2</u>	<u>1</u>	<u>Huaco</u>
FLOAT SHOE		
GUIDE SHOE <u>REG</u>	<u>1</u>	<u>"</u>
CENTRALIZERS <u>S-4</u>	<u>5</u>	<u>"</u>
BOTTOM PLUG		
TOP PLUG <u>S-W</u>	<u>1</u>	<u>"</u>
HEAD <u>PC</u>	<u>1</u>	<u>"</u>
BACKER <u>BASKET</u>	<u>1</u>	<u>"</u>
OTHER <u>ROTATING HEAD</u>	<u>1</u>	<u>"</u>

**PERSONNEL AND SERVICE UNITS**

NAME	UNIT NO. & TYPE	LOCATION
<u>D RANK</u>	<u>5012 P</u>	<u>FRATT, KS</u>
<u>D BEGLER</u>	<u>80-PIRE</u>	<u>FRATT, KS</u>
<u>D Ramsey</u>	<u>4604-8206</u>	<u>GR. BEAD, KS</u>
	<u>BULL</u>	

**MATERIALS**

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB./GAL.-API \_\_\_\_\_

DISPL. FLUID \_\_\_\_\_ DENISTY \_\_\_\_\_ 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. \_\_\_\_\_ IN \_\_\_\_\_

PERFPAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_

OTHER \_\_\_\_\_

OTHER \_\_\_\_\_

DEPARTMENT Cement

DESCRIPTION OF JOB 4 1/2" Cement

JOB DONE THRU: TUBING  CASING  ANNULUS  TBG/ANN.

CUSTOMER REPRESENTATIVE X Mac Jones

HALLIBURTON OPERATOR Dummy King COPIES REQUESTED \_\_\_\_\_

**CEMENT DATA**

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	<u>250</u>	<u>50/50 Poz</u>	<u>Huaco</u>	<u>Bulk</u>	<u>10% Salt - 59 HUACO-322, 10% GELSONITE 15K</u>	<u>1.51</u>	<u>13.6</u>

**PRESSURES IN PSI**

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_

BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_

AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_

SHUT-IN: INSTANT \_\_\_\_\_ 5-MIN. \_\_\_\_\_ 15-MIN. \_\_\_\_\_

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_

TREATING \_\_\_\_\_ DISPL \_\_\_\_\_ OVERALL \_\_\_\_\_

FEET 30 REASON AEF

**SUMMARY**

VOLUMES

PRESLUSH: BBL-GAL. 500 TYPE SUPERFLUSH

LOAD & BKDN: BBL-GAL. \_\_\_\_\_ PAD: BBL-GAL. \_\_\_\_\_

TREATMENT: BBL-GAL. \_\_\_\_\_ DISPL: BBL-GAL. 69.5

CEMENT SLURRY: BBL-GAL. 67.23

TOTAL VOLUME: BBL-GAL. \_\_\_\_\_

**REMARKS**

SEE JOB LOG

Thanks

REB

JUL 0 2 1991

CUSTOMER MCRAE & LEWIS  
LEASE FRATT - WEST  
WELL NO. 1  
JOB TYPE 4 1/2" CEMENT  
DATE 4-18-90

DISTRICT Plant Ks

DATE 4-18-90

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: McRAE & HENRY (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. # 1 LEASE TROYER MIST SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RANGE \_\_\_\_\_ FIELD \_\_\_\_\_ COUNTY HARPER STATE Ks OWNED BY \_\_\_\_\_

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THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_ FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_ PACKER: TYPE \_\_\_\_\_ SET AT \_\_\_\_\_ TOTAL DEPTH 4975' MUD WEIGHT \_\_\_\_\_ BORE HOLE 7 7/8" 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 (USED 10.5", 4 1/2", KB 4405), LINER (11.6"), TUBING, OPEN HOLE, and PERFORATIONS.

PREVIOUS TREATMENT: DATE \_\_\_\_\_ TYPE \_\_\_\_\_ MATERIALS \_\_\_\_\_

TREATMENT INSTRUCTIONS: TREAT THRU TUBING  ANNULUS  CASING  TUBING/ANNULUS  HYDRAULIC HORSEPOWER ORDERED Cement 4 1/2" PRODUCTION CASING WITH 250 SACS OF 50-50 Pbz CONTAINING 10% SACT, 5% HALAD-322 & 10% COLSONITE PER WELL R.W. 500 GAL SUPERFLUSH AHEAD OF CEMENT

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. Invoices are payable NET by the 20th of the following month after date of invoice.
b) To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them from and against any claims, liability, expenses, attorneys fees, and costs of defense to the extent permitted by law.
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, nor the results of any treatment or service, nor the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton.
d) That 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 OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE.
e) That Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton.

JUL 02 1991

FROM CONFIDENTIAL

JUN 25 1990

CONSERVATION DIVISION Wichita, Kansas

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT. SIGNED [Signature] CUSTOMER DATE April 18, 1990 TIME \_\_\_\_\_ A.M. P.M.

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.

CUSTOMER

**HALLIBURTON SERVICES**  
**'JOB LOG**

WELL NO. 21 LEASE TROYER #157 TICKET NO. 904037  
 CUSTOMER MCRAE & HEURY PAGE NO. \_\_\_\_\_  
 JOB TYPE 4 1/2" LONGSTENG DATE 4-18-90

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
4/17	2230							Called out - Ready @ 0330
4/18	0330							ON LOC - DP LAYED DOWN - REG GETTING READY TO RUN CASING
	0412							START CASING IN HOLE
	0605							CASING IN HOLE - Hook up & Break Call w/ REG PUMP
	0705	5.0	5.0	✓	✓	400		RUN FRESH WATER AHEAD
	0706	5.0	500.4	✓	✓	450		RUN SUPER FRESH
	0709	5.0	5.0	✓	✓	450		RUN FRESH WATER SPACE
	0710	6.7	67.2	✓	✓	600		MIX CEMENT
	0720							FRESH MIXING - RELEASE PUMP - WASH OUT PUMP & LINES
	0723	8.5	69.5	✓	✓	1000		DISPLACE PULG
	0731			✓		1100		PULG DOWN - RELEASE PRESS - FEAT HOLE
								ROTATED CASING WHILE MIXING & DISPLACING
								- WASH UP
	0800							JOB COMPLETE - Bulk Tank Released
								ORIGINAL CONFIDENTIAL
								THANKS - REG
								RELEASED
								JUL 02 1991
								FROM CONFIDENTIAL

RECEIVED  
STATE OF KANSAS  
JUN 25 1990  
CONSERVATION DIVISION  
Wichita, Kansas

CUSTOMER