

ORIGINAL

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

CONFIDENTIAL

Operator: License # 9953
Name: Harris Oil and Gas Company **KCC**

Address 1125 Seventeenth Street **AUG 23 2000**
Suite 2290

City/State/Zip Denver, CO 80202

Purchaser: EOTT

Operator Contact Person: Doug Hoisington

Phone (303) 293-8838

Contractor: Name: Norseman Drilling Company

License: 3779

Wellsite Geologist: Frank Gagliardi

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: old well info as follows: N/A

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

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

6/9/00 6/20/00 8/25/00
Spud Date Date Reached TD Completion Date

API NO. 15- 129-21605-0000

County Morton

Appx - SW - NE - SW Sec. 20 Twp. 33S Rge. 42 X ^E _W

1680 Feet from S (circle one) Line of Section

1680 Feet from E (circle one) Line of Section

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

Lease Name Rich Smith Well # 4-20

Field Name East Winter

Producing Formation Morrow

Elevation: Ground 3545 KB 3554

Total Depth 5140' PBDT 5040'

Amount of Surface Pipe Set and Cemented at 1437 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from N/A

feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan ALT 1 7/31/01 AB
(Data must be collected from the Reserve Pit)

Chloride content 1000 ppm Fluid volume 500 bbls

Dewatering method used Air Evaporation

Location of fluid disposal if hauled offsite: _____

Operator Name N/A

Lease Name _____ License No. _____

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

County _____ Docket No. _____

STATE CORPORATION COMMISSION
RECEIVED

CONFIDENTIAL

CONSERVATION DIVISION
Wichita, Kansas
AUG 25 2000

RELEASED

AUG 23 2000

FROM CONFIDENTIAL

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 Doug Hoisington

Title Operations Manager Date 8/23/00

Subscribed and sworn to before me this 23 day of August, 19 2000

Notary Public Sammy Lynn Herman

Date Commission Expires March 31, 2001

K.C.C. OFFICE USE ONLY		
F	<input checked="" type="checkbox"/>	Letter of Confidentiality Attached
C	<input checked="" type="checkbox"/>	Wireline Log Received
C	<input checked="" type="checkbox"/>	Geologist Report Received
Distribution		
<input checked="" type="checkbox"/>	KCC	<input type="checkbox"/> SWD/Rep <input type="checkbox"/> NGPA
<input type="checkbox"/>	KGS	<input type="checkbox"/> Plug <input type="checkbox"/> Other (Specify)

Operator Name Harris Oil and Gas Company Lease Name Rich Smith Well # 4-20

Sec. 20 Twp. 33S Rge. 42 East West
 County Morton

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: **CBL**
HRI
SDL/OSN
LSS
Micro

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

See Attached

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"	33	1437'	Midcon/C	285/100	3% cc, 1/2# Flocele 2% cc, 1/4# Flocele
Production	7 7/8"	8 5/8"	14/15.5	5145'	Class H	150	10% EA-2, 10% NaCl, 5# Gilsonite & .6% Halad 322

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<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 Specify Footage of Each Interval Perforated		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth	
	4	5102'-5112'	1500 gal 7 1/2% DSFE	5102'-5112'
	CIBP		5040'	
4	4482'-4488'	1000 gal N-Versperse	4482'-4488'	
		17,000 gal 65Q N ₂ Delta w/	17,600# 20/40 Sand	

TUBING RECORD	Size	Set At	Packer At	Liner Run	Sand
	2 3/8"	4534'	N/A	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or Inj. 8/25/00			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 Bbls. 20	Gas Mcf 50	Water Bbls. 10	Gas-Oil Ratio 2500	Gravity N/A

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 Morrow

CONFIDENTIAL

ORIGINAL

Form.	Tops	Log	Depth	Subsea
Kansas City "A"	3496			+60
Kansas City "B"	3554			Sea Level
Kansas City "C"	3628			-74
Marmaton	3839			-285
Cherokee	4078			-524
Atoka	4246			-692
Morrow	4392			-838
L3	4462			-908
L2	4481			-927
L1	4574			-1020
"G" Zone	4846			-1292
Keyes Sandstone	4868			-1314
Chester	4940			-1396
St. Gen	4969			-1415
St. Louis	5102			-1548

KCC

AUG 23 2000

CONFIDENTIAL

RELEASED

AUG 23 2001

FROM CONFIDENTIAL

RECEIVED
STATE CORPORATION COMMISSION

AUG 25 2000

CONSERVATION DIVISION
Wichita, Kansas



JOB SUMMARY

ORDER NO. 7006

TICKET #

66706 ORIGINAL 6-9-00

TICKET DATE

6-9-00

REGION North America

NWA/COUNTRY

MID CON USA

BDA / STATE

KS

COUNTY

MORTON

MBU ID / EMP #

106332

EMPLOYEE NAME

JAMES GUTHRIK

PSL DEPARTMENT

ZONAL ISOLATION

KCC

LOCATION

LIBERAL KS

COMPANY

HARRIS OIL & GAS

CUSTOMER REP / PHONE

HAROLD FRAYLI ?

AUG 23 2001

BUCKET AMOUNT

9272.87

WELL TYPE

OIL

API / UWI #

WELL LOCATION

NO. BLK HART KS

DEPARTMENT

CREMENT

JOB PURPOSE CODE

010 8 5/8 SAREFLER

CONFIDENTIAL

LEASE / WELL #

RICH SMITH 4-20

SEC / TWP / RNG

20-335-42W

HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS
J. GUTHRIK 106332/12.5			
S. EDGAR 106049/14.5			
C. GARZA 194445/10.5			
K. MOSE 204458/10.5			

HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES
420624	100						
54218-78202	100						
54079-6612	50						
53336-77031	50						

Form Name _____ Type: _____
 Form Thickness _____ From _____ To _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. _____ Pressure _____
 Misc. Data _____ Total Depth _____

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
Float Collar		
Float Shoe		
Guide Shoe	1	How CO
Centralizers	4	
Bottom Plug		
Top Plug	1	
Head	1	
Packer		
Other	WALDA 1LB	

MATERIALS

Treat Fluid _____	Density _____	Lb/Gal _____
Disp. Fluid _____	Density _____	Lb/Gal _____
Prop. Type _____	Size _____	Lb. _____
Prop. Type _____	Size _____	Lb. _____
Acid Type _____	Gal. _____	% _____
Acid Type _____	Gal. _____	% _____
Surfactant _____	Gal. _____	In _____
NE Agent _____	Gal. _____	In _____
Fluid Loss _____	Gal/Lb _____	In _____
Gelling Agent _____	Gal/Lb _____	In _____
Fric. Red. _____	Gal/Lb _____	In _____
Breaker _____	Gal/Lb _____	In _____
Blocking Agent _____	Gal/Lb _____	
Perpac Balls _____	Qty. _____	
Other _____		
Other _____		
Other _____		
Other _____		

DATE	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
	6-9-00	6-9-00	6-9-00	6-9-00
TIME	0800+0630	1030	1930	1945

WELL DATA

	NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
Casing	N	24	8 7/8	KB	1436.9	
Liner						
Liner						
Tbg/D.P.						
Tbg/D.P.						
Open Hole						SHOTS/FT.
Perforations						
Perforations						
Perforations						

ACO-1 COPY

HOURS ON LOCATION		OPERATING HOURS		DESCRIPTION OF JOB
DATE	HOURS	DATE	HOURS	
				SRB JOB LOG
TOTAL		TOTAL		

ORDERED _____	HYDRAULIC HORSEPOWER	Used _____
	Avail. _____	
TREATED _____	AVERAGE RATES IN BPM	Overall _____
	Disp. _____	
FEET 42	CEMENT LEFT IN PIPE	Reason SHOCK SOWT
	Reason _____	

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES	YIELD	LBS/GAL
1	285	MIDCON L	BULK	3% CL - 1/2# FLOCEL R	3.24	11.1
1	100	PSR4 PENS	BULK	2% CL - 1/4# FLOCEL R	1.34	14.8

Circulating _____	Displacement _____	Preflush: Gal - BBI _____	Type _____
Breakdown _____	Maximum _____	Load & Bkdn: Gal - BBI _____	Pad: BBI - Gal _____
Average _____	Frac Gradient _____	Treatment Gal - BBI _____	Disp: BBI - Gal 89.7
Shut In: Instant _____	5 Min _____ 15 Min _____	Cement Slurr Gal - BBI _____	
		Total Volume Gal - BBI 115 + 24 277.7	

Frac Ring #1 _____ Frac Ring #2 _____ Frac Ring #3 _____ Frac Ring #4 _____

THE INFORMATION STATED HEREIN IS CORRECT CUSTOMER'S REPRESENTATIVE SIGNATURE



HALLIBURTON

CONFIDENTIAL

JOB LOG

ORDER NO. 70006

TICKET # 66766

TICKET DATE 6-9-00

REGION North America

NWA/COUNTRY MID CON USA

BDA / STATE KS ORIGINAL

COUNTY MORTON

MBU ID / EMP # 106332

EMPLOYEE NAME JAMES GUTHRIE

PSL DEPARTMENT ZONAL ISOLATION KCC

LOCATION LIBERAL KS

COMPANY HARRIS OIL & GAS

CUSTOMER REP / PHONE HAROLD FRAYLI ?

TICKET AMOUNT \$9272.87

WELL TYPE OIL

API / UWI # AUG 23 2000

WELL LOCATION NO. ELKHART K.S.

DEPARTMENT CREMENT

JOB PURPOSE CODE DID 8 3/4 SARR

LEASE / WELL # RICH SMITH 4-20

SEC / TWP / RANG 20-33S-42W

HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS)	HRS
J. GUTHRIE 106332	10.5						
S. ENERAL 106044	10.5						
E. GARZA 194445	10.5						
K. MONTANA 204456	10.5						

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
	0630							CALLRD OUT
	1030							ON LOCATION LACK 80 FT TO DRILL
	1045							SAFETY MEETING HES
	1100							RIG UP TRUCK
	1630							SAFETY MEETING TOTAL
	1645							RIG UP LEASING CREW
	1715							RUN F.R.
	1810							RIG UP HEAD
	1830							SWITCH TO PT
	1832					3000		PSI TEST
	1835	6	165				200	PUMP LMT
	1905	6.5	24				200	PUMP LMT
	1910							SHUT DOWN AND DROD PLUG
	1912	6.5	45				80	DISPLACR
	1930	2					112	SLOW RATE
	1945						200-600	DROD PLUG
	1946							CHECK FLOAT FIELD

RELEASED

AUG 23 2001

FROM CONFIDENTIAL



CONFIDENTIAL
HALLIBURTON

KC Work Order Contract

KCC ORIGINAL

AUG 23 2000 Halliburton Energy Services, Inc.
Houston Texas 77056

AUG 23 2000 Order Number

667061

70012 SAP

CONFIDENTIAL

CONFIDENTIAL

TO: HALLIBURTON ENERGY SERVICES, INC. YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICE PERSONNEL TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO CUSTOMER LISTED BELOW AND DELIVER AND SELL PRODUCTS, SUPPLIES AND MATERIALS FOR THE PURPOSE OF SERVICING:

Well No 4-20	Farm or Lease RICH SMITH	County MORTON	State KS	Well Permit #
Customer HARRIS OIL & GAS	Well Owner SARA	Job Purpose 010 354 SURFACE		

THIS WORK ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

- A. CUSTOMER REPRESENTATION - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton Energy Services, Inc. (hereinafter "Halliburton").
- B. PRICE AND PAYMENT - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices are exclusive of taxes. 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 the 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 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 account, or Halliburton's actual attorneys fees, whichever is greater, plus all collection and court costs. Customer agrees that the amount of attorney fees set out herein are reasonable and necessary.
- C. RELEASE AND INDEMNITY - Customer agrees to RELEASE Halliburton Group from any and all liability for any and all damages whatsoever to property of any kind owned by, in the possession of, or leased by Customer and those persons and entities Customer has the ability to bind by contract or which are co-interest owners or joint ventures with Customer. Customer also agrees to DEFEND, INDEMNIFY, AND HOLD Halliburton Group HARMLESS from and against any and all liability, claims, costs, expenses, attorney fees and damages whatsoever for personal injury, illness, death, property damage and loss resulting from:

loss of well control; services to control a wild well whether underground or above the surface; reservoir or underground damage, including loss of oil, gas, other mineral substances or water; surface damage arising from underground damage; damage to or loss of the well bore; subsurface trespass or any action in the nature thereof; fire; explosion; subsurface pressure; radioactivity; and pollution and contamination and its cleanup and control.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations will apply even if the liability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of one or more members of the Halliburton Group, the unseaworthiness of any vessel or any defect in the data, products, supplies, materials or equipment furnished by any member or members of the Halliburton Group whether in the design, manufacture, maintenance or marketing thereof or from a failure to warn of such defect. "Halliburton Group" is defined as Halliburton Energy Services, Inc., its parent, subsidiary, and affiliated companies, insurers and subcontractors and all its/officers, directors, employees, consultants and agents. CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations apply whether the personal injury, illness, death, property damage or loss is suffered by one or more members of the Halliburton Group, Customer, or any other person or entity. Customer agrees to support such obligations assumed herein with liability insurance with limits of not less than \$500,000. Customer agrees to name Halliburton Group as named additional insureds on all of its general liability policy(s). Customer agrees that its liability under this Contract is not limited by the amounts of its insurance coverage, except where and as may be required by applicable local law for the provisions of this Contract to be enforceable.

D. EQUIPMENT LIABILITY - Customer shall at its risk and expense attempt to recover any Halliburton Group equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the replacement cost, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton Group. Customer shall be responsible for damage to or loss of Halliburton group equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton group equipment damaged by corrosion or abrasion due to well effluents.

E. LIMITED WARRANTY - Halliburton warrants only title to the equipment, products, and materials supplied under this Contract and that same are free from defects in workmanship and materials for thirty (30) days from the date of delivery. **THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE.** Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. 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 EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON GROUP.** Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton Group shall not be liable for and **CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION**, even if such is contributed to or caused by the active or passive negligence, fault or strict liability of any member or members of Halliburton Group. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. GOVERNING LAW - The validity, interpretation and construction of this Contract shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.

G. DISPUTE RESOLUTION - Customer and Halliburton agree that any dispute that may arise out of the performance of this Contract shall be resolved by binding arbitration by a panel of three arbitrators under the rules of the American Arbitration Association. The arbitration will take place in Houston, TX.

H. SEVERABILITY - If any provision or part thereof of this Contract shall be held to be invalid, void, or of no effect for any reason, such holding shall not be deemed to affect the validity of the remaining provisions of this Contract which can be given effect, without the invalid provision or part thereof, and to this end, the provisions of this Contract are declared to be severable. Customer and Halliburton agree that any provision of this Contract that is unenforceable or void under applicable law will be modified to achieve the intent of the parties hereunder to the greatest extent allowed by applicable law.

I. MODIFICATIONS - Customer agrees that Halliburton shall not be bound by any modifications to this Contract, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President, Legal, 10000 Katy Drive, Houston, TX, 77020.

I HAVE READ AND UNDERSTAND THIS WORK ORDER CONTRACT WHICH CONTAINS RELEASE AND INDEMNITY LANGUAGE WHICH CUSTOMER ACKNOWLEDGES IS CONSPICUOUS AND AFFORDS FAIR AND ADEQUATE NOTICE AND I REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

AUG 23 2000

FROM CONFIDENTIAL

SIGNED: [Signature] DATE: 6-9-00 TIME: 4:50 A.M./P.M. (P)
CUSTOMER Authorized Signatory

Customer Acceptance of Materials and Services

THE CUSTOMER HEREBY ACKNOWLEDGES RECEIPT OF THE MATERIALS AND SERVICES DESCRIBED ON THE ATTACHED ORDER NUMBER 667061
[Signature] CUSTOMER Authorized Signatory



HALLIBURTON **JOB SUMMARY** ORDER NO. 70006

TICKET # **707945** TICKET DATE **6-21-00**

REGION **North America** **CONFIDENTIAL** WVA/COUNTRY **MidCont USA** BDA / STATE **Ks** COUNTY **Morton**

MBU ID / EMP # **MCL10110 106328** EMPLOYEE NAME **Nick Karbe** PSL DEPARTMENT **Z1**

LOCATION **Liberal** COMPANY **Harris Oil & Gas** CUSTOMER REP / PHONE **Harold Froad** ORIGINAL

TICKET AMOUNT **\$7852.53** WELL TYPE **OT** API / UWI # **KCC**

WELL LOCATION **N of Elk Mart** DEPARTMENT **Cement** JOB PURPOSE CODE **035**

LEASE / WELL # **Rich Smith #4-20** SEC / TWP / RNG **20-33S-42W** **AUG 23 2000**

HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS
N. Karbe 106328 12%			
R. Elwood 106270 4			
K. Mauser 104455 12%			
B. Ferguson 106154 4			

HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES	HES UNIT NUMBERS	R/T MILES
421270	150						
54218/78202	150						
54029/6612	80						

Form Name _____ Type: _____
 Form Thickness _____ From _____ To _____
 Packer Type _____ Set At _____
 Bottom Hole Temp. _____ Pressure _____
 Misc. Data _____ Total Depth _____

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY	MAKE
Float Collar insert	1	#
Float Shoe Filltube	1	0
Guide Shoe Reg	1	0
Centralizers S-4	8	C
Bottom Plug		
Top Plug S-W Alum	1	0
Head Basket	1	0
Packer		
Other		

MATERIALS

Treat Fluid	Density	Lb/Gal
Disp. Fluid	Density	Lb/Gal
Prop. Type	Size	Lb.
Prop. Type	Size	Lb.
Acid Type	Gal.	%
Acid Type	Gal.	%
Surfactant	Gal.	In
NE Agent	Gal.	In
Fluid Loss	Gal/Lb	In
Gelling Agent	Gal/Lb	In
Fric. Red.	Gal/Lb	In
Breaker	Gal/Lb	In
Blocking Agent	Gal/Lb	
Perfpac Balls	Qty.	
Other		
Other		
Other		
Other		

DATE	CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
	6-21-00	6-21-00	6-21-00	6-21-00
TIME	0500	0830	1845	1945

WELL DATA

	NEW/USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW
Casing	4	14/15.5	5 1/2	0	50	
Liner						
Liner						
Tbg/D.P.						
Tbg/D.P.						
Open Hole						SHOTS/FT.
Perforations						
Perforations						
Perforations						

HOURS ON LOCATION		OPERATING HOURS		DESCRIPTION OF JOB
DATE	HOURS	DATE	HOURS	
6-21-00	12 1/2 hrs	6-21-00	1 hr	035
TOTAL	12 1/2 hr	TOTAL	1 hr	

HYDRAULIC HORSEPOWER

ORDERED	Avail.	Used

AVERAGE RATES IN BPM

TREATED	Disp.	Overall

CEMENT LEFT IN PIPE Reason **sh. jt.**

CEMENT DATA

STAGE	SACKS	CEMENT	BULK/SKS	ADDITIVES	YIELD	LBS/GAL
Ld	30	Prem	B	10% Cal Seal, 5% Gilsocite, 16% Haled-322, 10% Salt	1.43	15.23
T1	150	Prem	B	" " " "	1.43	15.23
W3-MH	25	Prem	B	" " " "	1.43	15.23

Circulating _____	Displacement _____	Preflush: Gal - BBI _____	Type _____
Breakdown _____	Maximum _____	Load & Bkdn: Gal - BBI _____	Pad: BBI - Gal _____
Average _____	Frac Gradient _____	Treatment Gal - BBI _____	Disp: BBI - Gal 124
Shut In: Instant _____	5 Min _____	Cement Slurr Gal - BBI 32/38	
	15 Min _____	Total Volume Gal - BBI _____	

Frac Ring #1 _____ Frac Ring #2 _____ Frac Ring #3 _____ Frac Ring #4 _____

THE INFORMATION STATED HEREIN IS CORRECT

CUSTOMER'S REPRESENTATIVE SIGNATURE **H Froad**

ORDER NO. 70006

REGION **North America** NWA/COUNTRY **MidCont U.S.A.** BDA / STATE **Ks** COUNTY **Marion**

MBU ID / EMP # **MCLLO110 106328** EMPLOYEE NAME **Nick Karbe** PSL DEPARTMENT **21 ORIGINAL**

LOCATION **Liberal** COMPANY **Harris Oil & Gas** CUSTOMER REP / PHONE **Harold Frank**

TICKET AMOUNT **\$7852.53** WELL TYPE **01** API / UWI # **00**

WELL LOCATION **N. of Elkhart** DEPARTMENT **Cement** JOB PURPOSE CODE **035** **AUG 23 2000**

LEASE / WELL # **Rich Smith #4-20** SEC / TWP / RNG **20 - 33S - 42W**

CONFIDENTIAL

HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS
N. Karbe 106328 12 1/2			
R. Ellwood 106270 8			
K. Meuser 204458 12 1/2			
R. Ferguson 106154 4			

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psl)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
	0500							called out
	0830							on loc Hold safety mtg Setup Trk
	1130							tigh. D.D.P. out of hole, nipple down
	1500							st FE
	1742							Break circ
	1852	2	3/3			25		Plug RH+MH 25sks 15.3"
	1906					2000		Test lines
	1910	6.5	0			350		st cnt scavenger 30sks 10"
	1915	6.5	32/0			200		st cnt 150sks 15.3"
	1920		38					end cnt
	1921							wash pump line
	1924							rel plug
	1926	6.5	0			100		st disp
	1941	6.5	94			150		catch cnt
	1946	3.5	114			475		slow rate
	1950	2.5	124			550/150		bump plug
	1951							rel pipes Plathead

RELEASED
AUG 23 2001
FROM CONFIDENTIAL

Job complete
Thank you
Nick & crew



CONFIDENTIAL Work Order Contract

ORIGINAL

Halliburton Energy Services, Inc.
Houston Texas 77056

Order Number

707445

70012 SAP

TO: HALLIBURTON ENERGY SERVICES, INC. - YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICE PERSONNEL TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO CUSTOMER LISTED BELOW AND DELIVER AND SELL PRODUCTS, SUPPLIES AND MATERIALS FOR THE PURPOSE OF SERVICING:

Well No. 4-20	Farm or Lease Rich Smith	County Martin	State KS	Well Permit # KCC
Customer Harris Oil & Gas	Well Owner Same	Job Purpose 035	AUG 23 2000	

THIS WORK ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

CONFIDENTIAL

A. CUSTOMER REPRESENTATION - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton Energy Services, Inc. (hereinafter "Halliburton").

B. PRICE AND PAYMENT - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices are exclusive of taxes. 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 the 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 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 account, or Halliburton's actual attorneys fees, whichever is greater, plus all collection and court costs. Customer agrees that the amount of attorney fees set out herein are reasonable and necessary.

C. RELEASE AND INDEMNITY - Customer agrees to RELEASE Halliburton Group from any and all liability for any and all damages whatsoever to property of any kind owned by, in the possession of, or leased by Customer and those persons and entities Customer has the ability to bind by contract or which are co-interest owners or joint ventures with Customer. Customer also agrees to DEFEND, INDEMNIFY, AND HOLD Halliburton Group HARMLESS from and against any and all liability, claims, costs, expenses, attorney fees and damages whatsoever for personal injury, illness, death, property damage and loss resulting from:

loss of well control; services to control a wild well whether underground or above the surface; reservoir or underground damage, including loss of oil, gas, other mineral substances or water; surface damage arising from underground damage; damage to or loss of the well bore; subsurface trespass or any action in the nature thereof; fire; explosion; subsurface pressure; radioactivity; and pollution and contamination and its cleanup and control.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations will apply even if the liability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of one or more members of the Halliburton Group, the unseaworthiness of any vessel or any defect in the data, products, supplies, materials or equipment furnished by any member or members of the Halliburton Group whether in the design, manufacture, maintenance or marketing thereof or from a failure to warn of such defect. "Halliburton Group" is defined as Halliburton Energy Services, Inc., its parent, subsidiary, and affiliated companies, insurers and subcontractors and all its/their officers, directors, employees, consultants and agents. Customer's RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations apply whether the personal injury, illness, death, property damage or loss is suffered by one or more members of the Halliburton Group, Customer, or any other person or entity. Customer agrees to support such obligations assumed herein with liability insurance with limits of not less than \$500,000. Customer agrees to name Halliburton Group as named additional insureds on all of its general liability policy(s). Customer agrees that its liability under this Contract is not limited by the amounts of its insurance coverage, except where and as may be required by applicable local law for the provisions of this Contract to be enforceable.

D. EQUIPMENT LIABILITY - Customer shall at its risk and expense attempt to recover any Halliburton Group equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the replacement cost, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton Group. Customer shall be responsible for damage to or loss of Halliburton group equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton group equipment damaged by corrosion or abrasion due to well effluents.

E. LIMITED WARRANTY - Halliburton warrants only title to the equipment, products, and materials supplied under this Contract and that same are free from defects in workmanship and materials for thirty (30) days from the date of delivery. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. 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 EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON GROUP. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton Group shall not be liable for and CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such is contributed to or caused by the active or passive negligence, fault or strict liability of any member or members of Halliburton Group. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. GOVERNING LAW - The validity, interpretation and construction of this Contract shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.

G. DISPUTE RESOLUTION - Customer and Halliburton agree that any dispute that may arise out of the performance of this Contract shall be resolved by binding arbitration by a panel of three arbitrators under the rules of the American Arbitration Association. The arbitration will take place in Houston, TX.

H. SEVERABILITY - If any provision or part thereof of this Contract shall be held to be invalid, void, or of no effect for any reason, such holding shall not be deemed to affect the validity of the remaining provisions of this Contract which can be given effect, without the invalid provision or part thereof, and to this end, the provisions of this Contract are declared to be severable. Customer and Halliburton agree that any provision of this Contract that is unenforceable or void under applicable law will be modified to achieve the intent of the parties hereunder to the greatest extent allowed by applicable law.

I. MODIFICATIONS - Customer agrees that Halliburton shall not be bound by any modifications to this Contract, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President - Legal, 1100 Clinton Drive, Houston, TX. 77020.

RELEASED

I HAVE READ AND UNDERSTAND THIS WORK ORDER CONTRACT WHICH CONTAINS RELEASE AND INDEMNITY LANGUAGE WHICH CUSTOMER ACKNOWLEDGES IS CONSPICUOUS AND ADEQUATE NOTICE AND I REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

AUG 23 2000

SIGNED: X [Signature] FROM CONFIDENTIAL DATE: 6-21-00 TIME: 0930 (A.M./P.M.)
CUSTOMER Authorized Signatory

Customer Acceptance of Materials and Services

THE CUSTOMER HEREBY ACKNOWLEDGES RECEIPT OF THE MATERIALS AND SERVICES DESCRIBED ON THE ATTACHED ORDER NUMBER 707445

X [Signature]
CUSTOMER Authorized Signatory

White-Office

Canary-Field Office

Pink-Customer

Green-Retain

RECEIVED
STATE CORPORATION COMMISSION

AUG 25 2000
RELEASED
CONSERVATION DIVISION
Wichita Kansas
AUG 25 2001

WELL NAME: Rich Smith "4-20"
COMPANY: Harris Oil & Gas
LOCATION: 20-33s-42w
Wichita co Kansas
DATE: 8/25/00

KCC

AUG 25 2000

~~CONFIDENTIAL~~

~~ACO-1 COPY~~

CONFIDENTIAL

FROM CONFIDENTIAL

CONFIDENTIAL

TRILOBITE TESTING L.L.C.

ORIGINAL

OPERATOR : Harris Oil & Gas
WELL NAME: Rich Smith "4-20"
LOCATION : 20-33S-42W Morton co KS
INTERVAL : 4288.00 To 4538.00 ft

DATE 6-16-00
KB 3554.00 ft TICKET NO: 12626 DST #1
GR 3544.00 ft FORMATION: Morrow
TD 4538.00 ft TEST TYPE: CONVENTIONAL

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	10242	10242	3017			PF Fr. 1100 to 1130 hr
SI 60	Range(Psi)	4175.0	4175.0	5000.0	0.0	0.0	IS Fr. 1130 to 1230 hr
SF 60	Clock(hrs)	12 HR	12 HR	Elect			SF Fr. 1230 to 1330 hr
FS 120	Depth(ft)	4535.0	4535.0	4293.0	0.0	0.0	FS Fr. 1330 to 1530 hr

	Field	1	2	3	4	
A. Init Hydro	2299.0	2302.0	2120.0	0.0	0.0	T STARTED 0710 hr
B. First Flow	355.0	372.0	139.0	0.0	0.0	T ON BOTM 1058 hr
B1. Final Flow	441.0	449.0	307.0	0.0	0.0	T OPEN 1100 hr
C. In Shut-in	1256.0	1282.0	1145.0	0.0	0.0	T PULLED 1530 hr
D. Init Flow	539.0	556.0	335.0	0.0	0.0	T OUT 2030 hr
E. Final Flow	610.0	632.0	468.0	0.0	0.0	
F. Fl Shut-in	1284.0	1291.0	1137.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2295.0	2290.0	2113.0	0.0	0.0	Tool Wt. 5300.00 lbs
Inside/Outside	I	I	I			Wt Set On Packer 22000.00 lbs
						Wt Pulled Loose 12000.00 lbs
						Initial Str Wt 84000.00 lbs
						Unseated Str Wt 88000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.78 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 545.00 ft
						D.P. Length 3735.00 ft

RECOVERY

Tot Fluid 1175.00 ft of 545.00 ft in DC and 630.00 ft in DP
3105.00 ft of Gas in pipe.
180.00 ft of Gas cut Mud
0.00 ft of 14% gas 86% mud
995.00 ft of Oil & gas cut mud
0.00 ft of 16% gas 5% oil 79% mud
0.00 ft of
0.00 ft of
0.00 ft of

SALINITY 3800.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Flow:
Weak 2" blow built to strong. Bottom of bucket in 3 minutes. Gas to surface in 21 minutes. Gauged 29,400 CFPD.

Initial Shut-In:
Strong bottom of bucket blow-back.

Final Flow:
Strong immediately. Gauged 28,000 CFPD. Decreased to 23,700 CFPD in 60 minutes.

Final Shut-In:
Strong bottom of bucket blow-back.

SAMPLES: One
SENT TO: Caraway

Test Successful: Y

KCC
AUG 23 2000
CONFIDENTIAL

MUD DATA-----

Mud Type	Chemical
Weight	9.20 lb/c
Vis.	41.00 S/L
W.L.	9.20 in3
F.C.	0.00 in
Mud Drop Y	20.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	120.00 F
Hole Condition	Good
% Porosity	15.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Lanny Saloga
Co. Rep.	Harold Frauli
Contr.	Norseman
Rig #	2
Unit #	
Pump T.	

GAS RECOVERY

11/19/70

COMPANY: Harris Oil & Gas DATE: 6-16-00
WELL NAME: Rich Smith "4-20" KB Elev: 3554.00 ft TICKET #12626 DST #1
WELL LOCATION: 20-33S-42W Morton co KS GR Elev: 3544.00 ft FORMATION: Morrow
INTERVAL Fr.: 4288.00 To 4538.00 T.D.: 4538.00 ft TEST TYPE: CONVENTIONAL

GAS RECOVERY MEASURED WITH Merla Orifice

***** GAS RATES FOR FLOW #1

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
30	0.50	0	22	29400.0

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
10	0.50	0	20	28000.0
20	0.50	0	18	26600.0
30	0.50	0	16	25100.0
40	0.50	0	16	25100.0
50	0.50	0	16	25100.0
60	0.50	0	14	23700.0

*** TOOL DIAGRAM *** CONVENTIONAL

WELL NAME: Rich Smith "4-20"

LOCATION : 20-33S-42W Morton co KS

TICKET No. 12626 D.S.T. No. 1 DATE 6-16-00

TOTAL TOOL TO BOTTOM OF TOP PACKERS 27

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 34

TOTAL TOOL 61

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.	Stands	Single	Total
-------------------	--------	--------	-------

D.P. ANCHOR STND.	Stands	3 Single	1 Total	216
-------------------	--------	----------	---------	-----

TOTAL ASSEMBLY 277

D.C. ABOVE TOOLS.	Stands	9 Single	Total	545
-------------------	--------	----------	-------	-----

D.P. ABOVE TOOLS.	Stands	61 Single	Total	3735
-------------------	--------	-----------	-------	------

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 4557

TOTAL DEPTH 4538

TOTAL DRILL PIPE ABOVE K.B. 19

REMARKS:
Established 7 feet of pay gas burned.

H	P.O. SUB Cir. sub	4201
H	C.O. SUB Top of tool	4261
H	Double pin	4262
H	S.I. TOOL Sterling	4267
H		
H	HMV Sterling	4272
H	JARS Bowen	4277
H		
H		
H		
H	SAFETY JOINT Bowen	4279
H		
H	PACKER Sparton	4284
H		
H	PACKER Sparton	4288
H	DEPTH	
H	1 ft.	4289
H	ANCHOR 4 ft. perf	4293
H	Alpine	4293
H	Pu. sub	4298
H		
H	20 ft. perf	4318
H		
H	Co. sub	4319
H		
H		
H		
H		
H		
H		
H		
H		
H	3 stds 1 jt DP	4535
H	AK-1	4535
H		
H	Co. sub	4536
H		
H	BULLNOSE 2 ft. perf	
H	T.D.	4538

TEST HISTORY

12626 D.S.T.#1 Rich Smith "4-28" Harris Oil & Gas

Flag Points

	t (Min.)	P (PSig)
A:	0.00	2120.65
B:	0.00	139.13
C:	30.25	307.00
D:	60.25	1145.52
E:	0.00	335.36
F:	50.00	468.14
G:	121.50	1197.25
Qi:	0.00	2113.40

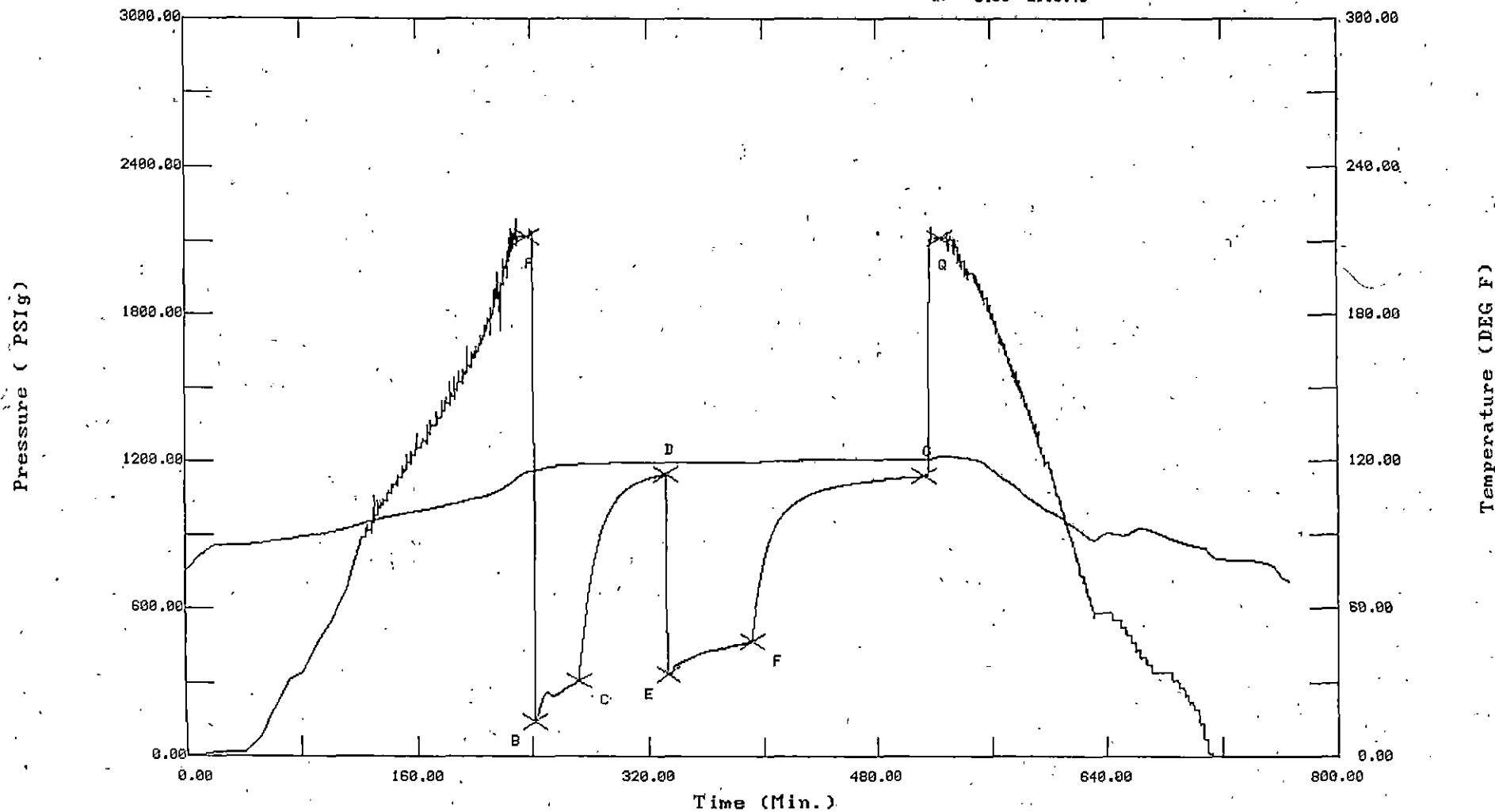
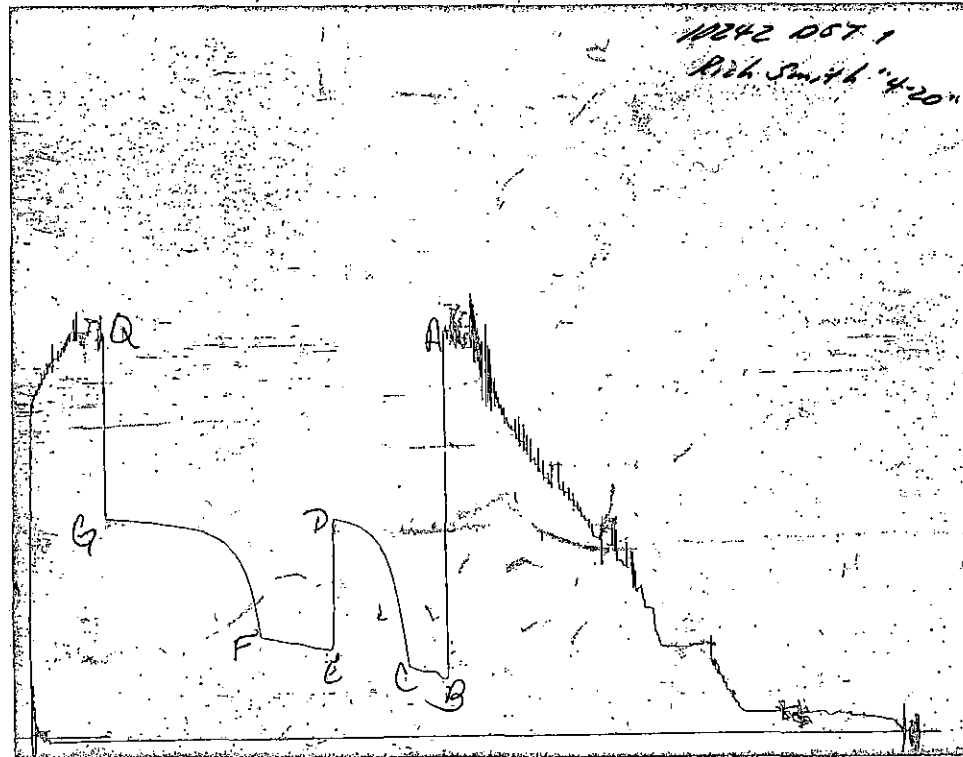
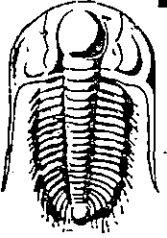


CHART PAGE



This is a photocopy of the actual AK-1 recorder chart.



TRIOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601 • (913) 625-4778

GAS VOLUME REPORT

Harri's 046
OPERATOR

Rich Smith "4-20"
WELL NAME AND NO.

1
DST NO.

675 21 min. into J.F.P.
J.F.P.

F.F.P.

Min.	Ins. of Water PSIG	Orifice Size	SCFD	Min.	Ins. of Water PSIG	Orifice Size	SCFD
<i>30</i>	<i>22</i>	<i>1/2"</i>	<i>29,400</i>	<i>10</i>	<i>20</i>	<i>1/2"</i>	<i>28,000</i>
				<i>20</i>	<i>18</i>	<i>"</i>	<i>26,600</i>
				<i>30</i>	<i>16</i>	<i>"</i>	<i>25,100</i>
				<i>40</i>	<i>16</i>	<i>"</i>	<i>25,100</i>
				<i>50</i>	<i>16</i>	<i>"</i>	<i>25,100</i>
				<i>60</i>	<i>14</i>	<i>"</i>	<i>23,700</i>

Remarks: *Gas burned.*
1 sample to Caraway

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

N^o 12626

Well Name & No. <u>Rich Smith "4-20"</u>	Test No. <u>1</u>	Date <u>6-16-00</u>
Company <u>Harris Oil & Gas</u>	Zone Tested <u>Madison</u>	
Address <u>Denver - Colo. 80202</u>	Elevation <u>3554</u> KB <u>3544</u> GL	
Co. Rep / Geo. <u>Harold Frouli</u>	Cont. <u>Nasserman R902</u>	Est. Ft. of Pay <u>7</u> Por. <u>15</u> %
Location: Sec. <u>20</u> Twp. <u>R35</u> Rge. <u>42 W</u> Co. <u>Madison</u> State <u>Ks</u>		
No. of Copies <u>See</u> Distribution Sheet (Y, N) <u>Y</u>	Turnkey (Y, N) <u>N</u>	Evaluation (Y, N) <u></u>

Interval Tested <u>4288 - 4538</u>	Initial Str Wt./Lbs. <u>84,000</u>	Unseated Str Wt./Lbs. <u>88,000</u>
Anchor Length <u>250'</u> <u>Tool = 27'</u>	Wt. Set Lbs. <u>22,000</u>	Wt. Pulled Loose/Lbs. <u>12,000</u>
Top Packer Depth <u>4283</u>	Tool Weight <u>5,300</u>	
Bottom Packer Depth <u>4288</u>	Hole Size — <u>7 7/8"</u>	Rubber Size — <u>6 3/4"</u>
Total Depth <u>4538</u>	Wt. Pipe Run <u>—</u>	Drill Collar Run <u>545</u>
Mud Wt. <u>9.2</u> LCM <u>3#</u> Vis. <u>41</u> WL <u>9.2</u>	Drill Pipe Size <u>4 1/2 XH</u>	Ft. Run <u>3735 19' up</u>
Blow Description <u>Work 2" to string ORB in 3 min. BTS in 21 min. See Flow chart. T.F.P.</u>		
<u>String ORB blow-back. T.S.T.P.</u>		
<u>String in mud. See Flow chart. F.F.P.</u>		
<u>String ORB blow-back. F.S.T.P.</u>		

Recovery — Total Feet <u>4175</u>	GIP <u>3,105</u>	Ft. in DC <u>545</u>	Ft. in DP <u>630</u>
Rec. <u>180</u> Feet Of <u>Gas cut mud</u>	<u>14</u> %gas	%oil	%water <u>86</u> %mud
Rec. <u>995</u> Feet Of <u>Oil & Gas cut mud</u>	<u>16</u> %gas	<u>5</u> %oil	%water <u>79</u> %mud
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water <u> </u> %mud
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water <u> </u> %mud
Rec. <u> </u> Feet Of <u> </u>	%gas	%oil	%water <u> </u> %mud
BHT <u>120</u> °F Gravity <u> </u>	°API D@ <u> </u>	°F Corrected Gravity <u> </u>	°API <u> </u>
RW <u>1.7</u> @ <u>67</u> °F	Chlorides <u>3,800</u> ppm	Recovery Chlorides <u>1,100</u> ppm	System <u> </u>

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2299</u>	<u>2120</u>		<u>3017 "06359"</u>	<u>3:30 AM</u>
(B) First Initial Flow Pressure	<u>355</u>	<u>139</u>		(depth) <u>4283</u>	T-Started <u>7:10 AM</u>
(C) First Final Flow Pressure	<u>441</u>	<u>307</u>		Recorder No. <u>10242</u>	T-Open <u>11:00 AM</u>
(D) Initial Shut-In Pressure	<u>1256</u>	<u>1145</u>		(depth) <u>4535</u>	T-Pulled <u>3:30 P.M.</u>
(E) Second Initial Flow Pressure	<u>539</u>	<u>335</u>		Recorder No. <u> </u>	T-Out <u>8:30 P.M.</u>
(F) Second Final Flow Pressure	<u>610</u>	<u>468</u>		(depth) <u> </u>	T-Off Location <u> </u>
(G) Final Shut-in Pressure	<u>1284</u>	<u>1137</u>		Initial Opening <u>30</u>	Test <u>✓</u>
(Q) Final Hydrostatic Mud	<u>2295</u>	<u>2113</u>		Initial Shut-in <u>60</u>	Jars <u>✓</u>
				Final Flow <u>60</u>	Safety Joint <u>✓</u>
				Final Shut-in <u>120</u>	Straddle <u> </u>
					Circ. Sub <u>✓</u>
					Sampler <u> </u>
					Extra Packer <u> </u>
					Elec. Rec. <u>✓</u>
					Mileage <u> </u>
					Other <u>8 Hrs. ✓</u>

61600659.017
 TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [Signature]

Our Representative [Signature]

TOTAL PRICE \$ 4,340.00