

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 # 3882

Name: SAMUEL GARY JR. & ASSOCIATES

Address 1670 BROADWAY, SUITE 3300
DENVER

City/State/Zip DENVER, CO 80202

Purchaser: ANR PIPELINE

Operator Contact Person: TOMM FERTAL

Phone (303) 831-4673

Contractor: Name: DUKE DRILLING

License: 5929

Wellsite Geologist: DALE PADGETT

Designate Type of Completion
 New Well Re-Entry Workover

Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Explos., Cathodic, etc)

If Workover: APR 09 1999

Operator: _____

Well Name: FROM CONFIDENTIAL

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. _____

10-20-97 11-3-97 11-14-97
Spud Date Date Reached TD Completion Date

API NO. 15- 033-20943-0000

County COMANCHE

-SW - SW - SE Sec. 34 Twp. 32S Rge. 19 ^E ^W

330 Feet from ^S ^N (circle one) Line of Section

2310 Feet from ^E ^W (circle one) Line of Section

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

Lease Name BRASS Well # 34-15

Field Name COLTER WEST

Producing Formation VIOLA

Elevation: Ground 1932' KB 1945'

Total Depth 6224' PBTD 5948'

Amount of Surface Pipe Set and Cemented at 661 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.

Drilling Fluid Management Plan ALT 1 2X 5-13-98
(Data must be collected from the Reserve Pit)

Chloride content _____ ppm. Fluid volume _____ bbls

Dewatering method used _____

Location of fluid disposal if hauled offsite: KCC

Operator Name FEB 03

Lease Name _____ License # CONFIDENTIAL

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, 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 Thomas Fertal
Title Senior Geologist Date 2/3/98
Subscribed and sworn to before me this 3rd day of February, 19 98.
Notary Public Clifford O'Shea
Date Commission Expires 8-24-98

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received
RECEIVED
DISTRIBUTION
STATE OF KANSAS
KGS
FEB 9 1998
SWD/Rep _____ NGPA _____
Plug _____ Other _____
(Specify)

Operator Name SAMUEL GARY JR. & ASSOCIATES Lease Name BRASS Well # 34-15

Sec. 34 Twp. 32S Rge. 19 East County COMANCHE

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 (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	STONE CORRAL	917'	1028'
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	WABAUNSEE	3328'	-1383'
List All E.Logs Run:		BASE HEBNER	4205'	-2260'
		LANSING KC	4378'	-2433'
		CHEROKEE	5030'	-3085'
		MISSISSIPPIAN	5124'	-3179'
		VIOLA	5844'	-3899'
		ARBUCKLE	6155'	-4210'

LONG SPACED SONIC, COMPENSATED
NEUTRON- DENSITY, MICRO RESISTIVITY
ARRAY INDUCTION SHALLOW FOCUSED ELECTRIC

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
CONDUCTOR	26"	20"		42'	REDIMIX		
SURFACE	12 1/4"	8 5/8"	23	661	Class A	225	3% CaCl ₂ + 8 lbs FlocBLE
PRODUCTION	7 7/8"	5 1/2"	15.50	5995'	50/50 Poz	325	0.5% FI-62; 2% gal

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
Perforate				
Protect Casing				
Plug Back TD				
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	5844-5858'	NONE	

TUBING RECORD	Size 2 7/8"	Set At 5842'	Packer At NONE	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Inj. 11-14-97	Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil Bbls. 0	Gas Mcf 550	Water Bbls. 0	Gas-Oil Ratio NA

Position 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 5844'-5858'



CEMENTING LOG

STAGE NO. APR 09 1999

Date 10-21-97 District Med. Lodge Ticket No. 6367
 Company Son Gary, Jr. & Assoc. Rig Duke 7
 Lease BRASS Well No. 34-13
 County Comanche State KS
 Location Coldwater, S. to Fet. Field 34-36S-19W
210-10-W/S

CASING DATA: PTA Squeeze
 Surface Intermediate Production Liner
 Size 8 5/8 Type J55S Weight 24 Collar _____

Burst Collapse
2,950 PSI 1370 PSI
 Casing Depths: Top 659 8 5/8 Bottom _____

ORIGINAL

Drill Pipe: Size 4 1/2 Weight 16.60 Collars xhole
 Open Hole: Size 12 1/4 T.D. 660 ft. P.B. to _____ ft.

CAPACITY FACTORS:

Casing: Bbls/Lin. ft. 0.637 Lin. ft./Bbl. 1.570
 Open Hole: Bbls/Lin. ft. 1.458 Lin. ft./Bbl. 0.68599
 Drill Pipe: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Annulus: Bbls/Lin. ft. 0.735 Lin. ft./Bbl. 1.36037
 Bbls/Lin. ft. _____ Lin. ft./Bbl. _____

Perforations: From _____ ft. to _____ ft. Amt. _____

CEMENT DATA:

Spacer Type: Fresh H₂O 5 BBL FROM CONFIDENTIAL
 Amt. _____ Skys Yield _____ ft³/sk Density _____ PPG _____

LEAD: Pump Time _____ hrs. Type CLASS A - ALW
3% CACI₂ + 1/4# Flo-Seal Excess _____
 Amt. 225 Skys Yield 1.97 ft³/sk Density 12.5 PPG _____

TAIL: Pump Time _____ hrs. Type CLASS A
3% CACI₂ + 2% Gel Excess _____
 Amt. 100 Skys Yield 1.34 ft³/sk Density 15.2 PPG _____

WATER: Lead 10.9 gals/sk Tail 6.5 gals/sk Total 74 Bbls.

Pump Trucks Used 233-302 Justin H.
 Bulk Equip. 259-314 John K.

CONFIDENTIAL

Float Equip: Manufacturer _____

Shoe: Type _____ Depth _____
 Float: Type Baffle Plate Depth 634.61
 Centralizers: Quantity 2 Plugs Top Rubber Btm. _____
 Stage Collars _____
 Special Equip. Basket
 Disp. Fluid Type Fresh H₂O Amt. 41 Bbls. Weight 8.34 PPG
 Mud Type Chemical Weight 9.1 PPG

COMPANY REPRESENTATIVE Ken McGuire

CEMENTER Harry Dweeling

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls/Min.	
7:15						Pipe on Bottom - Break Circ.
7:40	150		79		5 1/2	mix & Pump 225 sks. All at 3% CACI ₂ 1/4# Flo-seal.
8:00	150		24		5	100 sks. CLASS A + 3% CACI ₂ + 2% Gel
8:01						Cement In. stop pumps.
	200		10		4 1/2	Release Plug.
	250		25		4 1/2	Start Fresh H ₂ O Displace
	300		38		3	Slight PSI Increase
8:15	300		41		3	Slow Rate
	500					Bump Plug.
						Shut In.
						Cement Circ. to Surface

KCC
FEB 03
CONFIDENTIAL

STATE OF KANSAS
 FEB 9 1998

FINAL DISP. PRESS: _____ PSI BUMP PLUG TO _____ PSI BLEEDBACK _____ BBLs.

THANK YOU

Date 11-4-90 District Medicine Lodge Ticket No. 6383
 Company Sam Gary Jr + Assoc Rig Duke Rig #
 Lease Brass Well No. 34-1S
 County Comanche State Ks.
 Location Coldwater S.S. 2W, 1N, Field 34-32S, -19W

CEMENT DATA:
 Spacer Type: Mud Clean - 12 ~~FROM CONFIDENTIAL~~
 Amt. _____ Skys Yield _____ ft³/sk Density _____ PPG _____

CONFIDENTIAL

CASING DATA: PTA Squeeze
 Surface Intermediate Production Liner
 Size 52 Type _____ Weight 15.5 Collar _____

LEAD: Pump Time _____ hrs. Type 325 sk Class H
50:50:2 + 10% salt + .5% Ft-62 + 5% Excess Pol-Seal
 Amt. 325 Skys Yield 1.51 ft³/sk Density 13.8 PPG _____

TAIL: Pump Time _____ hrs. Type _____
 Excess _____
 Amt. _____ Skys Yield _____ ft³/sk Density _____ PPG _____
 WATER: Lead 6.0 gals/sk Tail _____ gals/sk Total 46 Bbls. _____

Casing Depths: Top _____ Bottom 5983.68

Pump Trucks Used 257-265 Stone Winsor
 Bulk Equip. 259-314 John Kelly

ORIGINAL

Drill Pipe: Size 4 1/2 Weight 16.60 Collars _____
 Open Hole: Size 7 1/8 T.D. 6224 ft. P.B. to _____ ft.

Float Equip: Manufacturer _____
 Shoe: Type Packer shoe Depth 5983
 Float Type AFV Insert Depth 5941
 Centralizers: Quantity 11 Plugs: Top 1 Btm. _____
 Stage Collars 1 - Basket + 1 stop Ring
 Special Equip. ~~_____~~
 Disp. Fluid Type 2% KCl water Amt. 1452 Bbls. Weight 8.34 PPG _____
 Mud Type _____ Weight _____ PPG _____

CAPACITY FACTORS:
 Casing: Bbls/Lin. ft. .0238 Lin. ft./Bbl. 42.01
 Open Holes: Bbls/Lin. ft. .0602 Lin. ft./Bbl. 16.59
 Drill Pipe: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Annulus: Bbls/Lin. ft. .0309 Lin. ft./Bbl. 32.40
 Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

COMPANY REPRESENTATIVE David Rice

CEMENTER Carl Bolding

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
12:00						KCC On location / Rig up
5:50						Pipe on Bottom, Break circulation w/rig set packer shoe depth, Drop ball for packer shoe, let fall + pump + circulate. Increase pressure.
6:15						Drop Ball for AFV Insert + lead plug in head. Circulate for 45 minutes.
7:05	300		12	12	5	Start - mud clean flush
7:17	300		18.5	6.5	2	amp. 25 sk in RAT + Mouse Hole
7:32			73.5	30	5 1/2	Start cement down casing - 300 sk cement in, stop pumps
7:35						switch valves to wash pumps + lines
7:35	100		100.5	2	4	switch valves + release plug
7:41	200		140.5	40	6	Start Displacement
7:44	200-150		152.5	12	4	Steady Rate
7:55	225		178.5	46		Mud clean turn shoe
8:05	300		238.5	40	2 1/2	Cement turn shoe - slow rate
			244	52		see pressure increase
						slow rate
						Release plug
						Released pressure (Frat Held)

ORIGINAL

TRILOBITE TESTING L.L.C.

15-033-20943

OPERATOR : Sam Gary Jr & Associates

DATE 10-28-97

WELL NAME: Brass #34-15

KB 1942.00 ft

TICKET NO: 10729

DST #1

LOCATION : 34-32S-19W

GR 1932.00 ft

FORMATION: Pawnee

INTERVAL : 4994.00 To 5034.00 ft

TD 5034.00 ft

TEST TYPE: CONV

CONFIDENTIAL

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 10 Rec.	10993	10993	3024			PF Fr. 0350 to 0400 hr
RI 90 Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 0400 to 0530 hr
SF 95 Clock(hrs)	12 hr	12 hr	Elec			SF Fr. 0530 to 0704 hr
FS 150 Depth(ft)	5030.0	5030.0	4997.0	0.0	0.0	FS Fr. 0704 to 0934 hr

	Field	1	2	3	4	
A. Init Hydro	2559.0	2502.0	2483.0	0.0	0.0	T STARTED 0100 hr
B. First Flow	54.0	101.0	27.0	0.0	0.0	T ON BOTM 0348 hr
C. Final Flow	65.0	63.0	34.0	0.0	0.0	T OPEN 0350 hr
D. In Shut-in	1832.0	1839.0	1831.0	0.0	0.0	T PULLED 0934 hr
E. Init Flow	54.0	75.0	27.0	0.0	0.0	T OUT 1200 hr
F. Final Flow	76.0	75.0	62.0	0.0	0.0	
G. Fl Shut-in	1821.0	1812.0	1810.0	0.0	0.0	TOOL DATA-----
H. Final Hydro	2331.0	2472.0	2432.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 75000.00 lbs
						Initial Str Wt 66000.00 lbs
						Unseated Str Wt 66000.00 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 207.00 ft
						D.P. Length 4801.00 ft

RECOVERY

75.00 ft of Drilling Mud
 75.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of
 0.00 ft of

0.00 ft in DP
RELEASED

APR 09 1999

FROM CONFIDENTIAL

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

BLOW DESCRIPTION

Initial Flow:
Strong blow, bottom of bucket in 1 min

Initial Shut In:
Bled off 2" - No blow back

Final Flow:
Strong blow, bottom of bucket as soon as tool opened
Gas to surface in 4 mins, MCF @ 96.3

Final Shut In:
Bled off 2" - No blow back

SAMPLES: Yes 1
SENT TO: Caraway Lab Liberal

Test Successful: Y

MUD DATA-----	
Mud Type	Chemical
Weight	9.10 lb/cf
Vis.	44.00 S/L
W.L.	8.80 in3
F.C.	0.00 in
Mud Drop Y	15.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	120.00 F
Hole Condition	Good
% Porosity	8.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Mike Colantonio
Co. Rep.	David Rice
Contr.	Duke
Rig #	7
Unit #	
Pump T.	

KCC
FEB 03
CONFIDENTIAL

1999

*** TOOL DIAGRAM *** CONV

WELL NAME: Brass #34-15

ORIGINAL

LOCATION : 34-32S-19W

TICKET No. 10729 D.S.T. No. 1 DATE 10-28-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 40

TOTAL TOOL 70

DRILL COLLAR ANCHOR IN INTERVAL

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

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

TOTAL ASSEMBLY 70

D.C. ABOVE TOOLS.	Stands	3	Single	1	Total	207
-------------------	--------	---	--------	---	-------	-----

D.P. ABOVE TOOLS.	Stands	76	Single	1	Total	4771
-------------------	--------	----	--------	---	-------	------

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5048

TOTAL DEPTH 5034

TOTAL DRILL PIPE ABOVE K.B. 14ft

REMARKS:
SAMPLER DATA

14.8 Cubic ft Gas

25Ml Mud

1500 PSI.

4000ml Total

P.O. SUB Top tool	4973
C.O. SUB 1ft	4974
S.I. TOOL Sterling	4979
3ft Sampler	4982
HMV Sterling	4987
JARS Bowens	4992
SAFETY JOINT Sterling	4994
PACKER Top 5ft	4989
PACKER Bottom 5ft	4994
DEPTH	
STUBB 1ft	4995
ANCHOR	
2ft Perf	4997
Alpine Rec. @	4997
RELEASED	
APR 09 1999	
FROM CONFIDENTIAL	
T.C.	
DEPTH	
5ft P.U. Sub	5002
28ft Perf	5030
AK-1 Rec. @	5030
BULLNOSE	
T.D. 4ft Bullplug	5034

REC'D
APR 11 1999

GAS RECOVERY

COMPANY: Sam Gary Jr & Associates
WELL NAME: Brass #34-15
WELL LOCATION: 34-32S-19W
INTERVAL Fr.: 4994.00 To 5034.00 T.D.: 5034.00 ft

DATE: 10-28-97
KB Elev: 1942.00 ft TICKET #10729 DST #1
GR Elev: 1932.00 ft FORMATION: Pawnee
TEST TYPE: CONV

GAS RECOVERY MEASURED WITH Merla Data

***** GAS RATES FOR FLOW #2

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
10	0.50	0	42	40700.0
15	0.50	0	55	46100.0
20	0.50	0	60	48600.0
25	0.50	0	72	53200.0
30	0.50	0	82	56800.0
35	0.50	0	92	60100.0
40	0.75	0	34	82800.0
45	0.75	0	34	82800.0
50	0.75	0	36	85200.0
55	0.75	0	36	85200.0
60	0.75	0	38	87500.0
65	0.75	0	40	89800.0
70	0.75	0	40	89800.0
75	0.75	0	42	92000.0
80	0.75	0	42	92000.0
85	0.75	0	44	94100.0
90	0.75	0	46	96300.0
95	0.75	0	46	96300.0

RELEASED

CONFIDENTIAL

APR 09 1999

FROM CONFIDENTIAL

DATE

1999 0 1

10/28/97

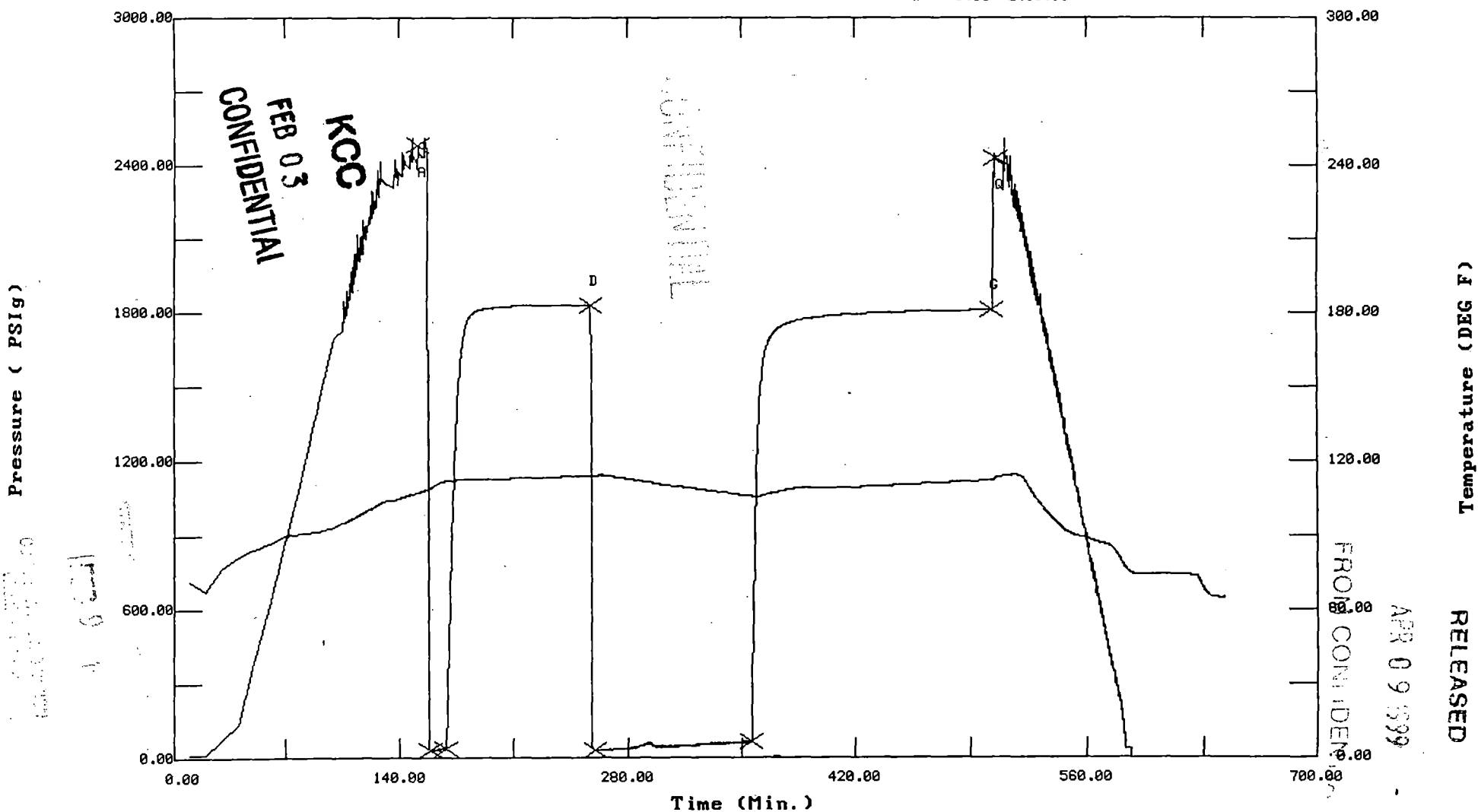
TEST HISTORY

10729 DST#1 Brass #34-15 Sam Gary JR.

Flag Points

t(Min.) P(PSig)

R: 0.00 2483.30
 B: 0.00 26.76
 C: 10.00 34.19
 D: 89.25 1830.61
 E: 0.00 27.18
 F: 96.00 61.85
 G: 146.50 1810.37
 Q: 0.00 2431.91



CONFIDENTIAL

TRILOBITE TESTING L.L.C.

15-033-20943

ORIGINAL

OPERATOR : Sam Gary Jr & Associates
WELL NAME: Brass #34-15
LOCATION : 34-32S-19W
INTERVAL : 5030.00 To 5126.00 ft

DATE 10-30-97
KB 1942.00 ft TICKET NO: 10730 DST #2
GR 1932.00 ft FORMATION: Cherokee
TD 5126.00 ft TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 10 Rec.	10993	10993	3024			PF Fr. 0428 to 0438 hr
SI 90 Range(Psi)	4500.0	4500.0	4995.0	0.0	0.0	IS Fr. 0438 to 0608 hr
SF 70 Clock(hrs)	12 hr	12 hr	Elec			SF Fr. 0608 to 0718 hr
FS 140 Depth(ft)	5122.0	5122.0	5035.0	0.0	0.0	FS Fr. 0718 to 0938 hr

	Field	1	2	3	4	
A. Init Hydro	2633.0	2746.0	2535.0	0.0	0.0	T STARTED 0200 hr
B. First Flow	152.0	171.0	39.0	0.0	0.0	T ON BOTM 0426 hr
B1. Final Flow	152.0	147.0	42.0	0.0	0.0	T OPEN 0428 hr
C. In Shut-in	1939.0	1917.0	1910.0	0.0	0.0	T PULLED 0938 hr
D. Init Flow	119.0	146.0	27.0	0.0	0.0	T OUT 1200 hr
E. Final Flow	119.0	111.0	35.0	0.0	0.0	
F. Fl Shut-in	1929.0	1913.0	1899.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	2527.0	2496.0	2410.0	0.0	0.0	Tool Wt. 1800.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 25000.00 lbs
						Wt Pulled Loose 75000.00 lbs
						Initial Str Wt 68000.00 lbs
						Unseated Str Wt 70000.00 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 237.00 ft
						D.P. Length 4833.00 ft

RECOVERY

Tot Fluid 65.00 ft of 65.00 ft in DC and 0.00 ft in DP
65.00 ft of Drilling Mud
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
0.00 ft of
SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

RELEASED

APR 09 1999

FROM CONFIDENTIAL

BLOW DESCRIPTION

Initial Flow:
Strong blow, bottom of bucket in 1 min
Initial Shut In:
Bled off 2" - no blow back
Final Flow:
Strong blow, bottom of bucket as soon
as soon as opened, Gas to surface
4 min
Final Shut In:
Bled off 2" - no blow back

SAMPLES: Yes 1
SENT TO: Caraway Lab Liberal

KCC
FEB 03
CONFIDENTIAL

MUD DATA-----

Mud Type	Chemical
Weight	9.30 lb/cf
Vis.	48.00 S/L
W.L.	10.00 in3
F.C.	0.00 in
Mud Drop Y	10.0 ft
Amt. of fill	0.00 ft
Btm. H. Temp.	110.00 F
Hole Condition	Good
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out N	
Tool Chased N	
Tester	Mike Colantonio
Co. Rep.	David Rice
Contr.	Duke
Rig #	7
Unit #	
Pump T.	

Test Successful: Y

*** TOOL DIAGRAM *** CONV

ORIGINAL

WELL NAME: Brass #34-15

LOCATION : 34-32S-19W

TICKET No. 10730 D.S.T. No. 2 DATE 10-30-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 30

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 36

TOTAL TOOL 66

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single Total 60

TOTAL ASSEMBLY 126

D.C. ABOVE TOOLS.Stands4 Single Total 237

D.P. ABOVE TOOLS.Stands76 Single 1 Total 4773

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 5136

TOTAL DEPTH 5126

TOTAL DRILL PIPE ABOVE K.B. 10ft

REMARKS:

SAMPLER DATA

3.6 Cubic Ft Gas

1200ml Mud

.550 Psi

4000ml Total

RELEASED

APR 09 1999

FROM CONFIDENTIAL

KCC
FEB 03
CONFIDENTIAL

P.O. SUB Top Tool 5000
C.O. SUB 1ft 5001

S.I. TOOL Sterling 5006

3ft SAMPLER 5009

HMV Sterling 5014

JARS Bowen 5019

CONFIDENTIAL

SAFETY JOINT Sterling 5021

PACKER Top 5ft 5025

PACKER Bottom 5ft 5030

DEPTH

STUBB 1ft 5031

ANCHOR

4ft Perf 5035

Alpine Rec. @ 5035

T.C.
DEPTH

5ft P.U. sub 5040

20ft Perf 5060

62ft Pipe Subs 5122

AK-1 Rec @ 5122

BULLNOSE

T.D. 4ft Bullplug 5126

FEB 03 1999

GAS RECOVERY

COMPANY: Sam Gary Jr & Associates
WELL NAME: Brass #34-15
WELL LOCATION: 34-32S-19W
INTERVAL Fr.: 5030.00 To 5126.00 T.D.: 5126.00 ft

DATE: 10-30-97
KB Elev: 1942.00 ft
GR Elev: 1932.00 ft
TICKET #10730
DST #2
FORMATION: Cherokee
TEST TYPE: CONV

ORIGINAL

GAS RECOVERY MEASURED WITH Merla Data

***** GAS RATES FOR FLOW #2

RELEASED

Time (min)	Orifice (in)	Pressure (Psi)	H2O (in)	Rate (cf/d)
5	0.50	0	10	19900.0
10	0.50	0	12	21900.0
15	0.50	0	12	21900.0
20	0.50	0	12	21900.0
25	0.50	0	14	23700.0
30	0.50	0	14	23700.0
35	0.50	0	15	24500.0
40	0.50	0	16	25100.0
45	0.50	0	16	25100.0
50	0.50	0	17	25800.0
55	0.50	0	18	26600.0
60	0.50	0	19	27300.0
65	0.50	0	19	27300.0
70	0.50	0	19	27300.0

APR 09 1999

FROM CONFIDENTIAL

CONFIDENTIAL

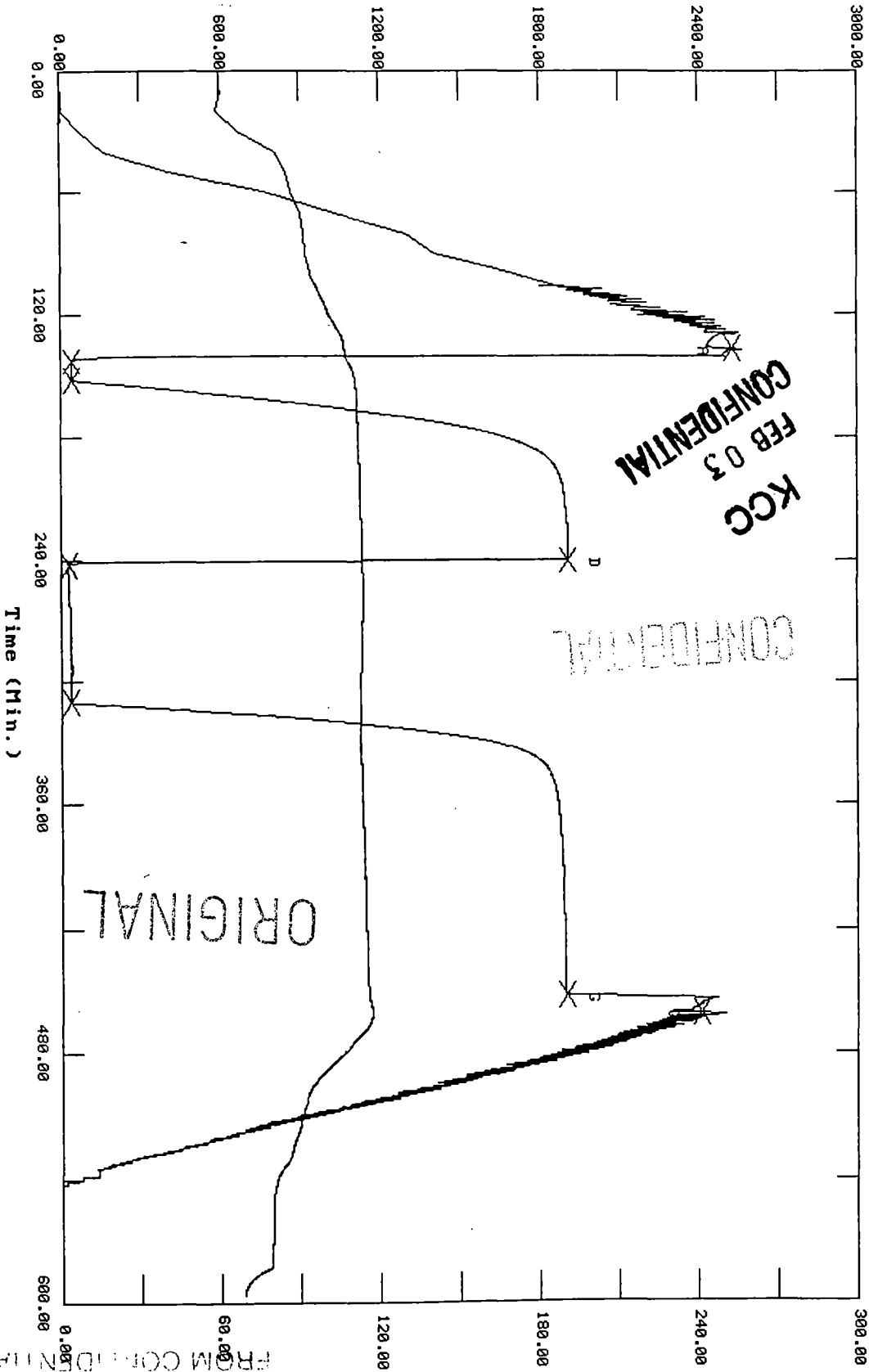
APR 09 1999

10730 DST#2 Brass #34-15 Sam Gary JR.

TEST HISTORY

Flag Points

	t (Min.)	P (PSig)
A:	0.00	2535.37
B:	0.00	39.38
C:	9.50	41.54
D:	88.75	1909.66
E:	0.00	26.54
F:	67.75	35.21
G:	142.50	1899.31
Q:	0.00	2410.48



CONFIDENTIAL
FEB 03
KCC

CONFIDENTIAL

Pressure (PSig)

Temperature (DEG F)

Time (Min.)

1573 9

ORIGINAL

FROM CONFIDENTIAL

APR 09 1999

RELEASED