

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

API NO. 15- 175-21270 - 0000

ORIGINAL

County Seward

C - SE - SE - Sec. 5 Twp. 33S Rge. 33 X E

Operator: License # 6120

660 Feet from (S)N (circle one) Line of Section

Name: Cabot Oil & Gas Corporation

660 Feet from (E)W (circle one) Line of Section

Address 9400 N. Broadway, Suite 608

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

City/State/Zip Oklahoma City, OK 73114

Lease Name Harrel Well # 2-5

Purchaser: Cabot Oil & Gas Marketing Corporation

Field Name Evalyn-Condit

Operator Contact Person: Jim R. Pendergrass

Producing Formation Chester

Phone (405) 478-6500

Elevation: Ground 2824' KB

Contractor: Name: H-40 Drilling

Total Depth 6425' PBDT 6148'

License: 30692

Amount of Surface Pipe Set and Cemented at 1,524 Feet

Wellsite Geologist:

Multiple Stage Cementing Collar Used? X Yes No

Designate Type of Completion  
X New Well Re-Entry Workover

If yes, show depth set 2902 Feet

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

If Alternate II completion, cement circulated from

feet depth to w/ sx cmt.

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

Drilling Fluid Management Plan DLT 1 3-4-93  
(Data must be collected from the Reserve Pit)

Operator:

Chloride content 4500 ppm Fluid volume 11,100 bbls

Well Name:

Dewatering method used Evaporation/Dry Out

Comp. Date Old Total Depth

Location of fluid disposal if hauled offsite:

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

Operator Name RELEASED

11/4/92 11/15/92 12/3/92  
Spud Date Date Reached TD Completion Date

License No. MAR 1 1 1994

Quarter Sec. Twp. S Rng. E/W

County 16 1993 FROM CONFIDENTIAL

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 State and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Jim R. Pendergrass  
Title Drilling Superintendent Date 12/15/92

Subscribed and sworn to before me this 15th day of December 19 92.

Notary Public Carrie B. Turner

Date Commission Expires Sept 2, 1996

K.C.C. OFFICE USE ONLY  
F  Confidentiality Attached  
C  Wireline Logs Received  
C  Geologist Report Received  
Distribution  
 KCC  SWD/Rep  NGPA  
 KGS  Plug  Other (Specify)

FEB 12  
CONFIDENTIAL

RECEIVED  
STATE CORPORATION COMMISSION  
FEB 16 1993

MAR 1 1 1994  
FROM CONFIDENTIAL

SIDE TWO

Operator Name Cabot Oil & Gas Corporation Lease Name Harrel Well # 2-5  
 Sec. 5 Twp. 33S Rge. 33  East County Seward  
 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 (Submit Copy.)  Yes  No  
 List All E.Logs Run:

Name	Top	Datum
Herrington	2556	
U. Krider	2585	
L. Krider	2616	
Winfield	2669	
Fort Riley	2730	
Council Grove	2887	
Base Heebner	4196	
Marmaton	4973	
Cherokee	5184	
Morrow	5556	
Chester	5764	
St. Genevieve	6083	
Saint Lewis	6248	

**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	12-1/4"	8-5/8"	24#	1,524'	HOWCO Lite	650	2% CC
					Premium Plus	150	2% CC
Production	7-7/8"	5-1/2"	15.5#	6,192'	.50-.50-Poz	375	
					.50-.50-Poz	525	(Stage 2)

**ADDITIONAL CEMENTING/SQUEEZE RECORD**

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
Perforate				
Protect Casing				
Plug Back				
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
2 SPF	6060'-6090' CHESTER	1,000 gals 15% NE-FE Acid	6060'-6090'

**TUBING RECORD** Size 2-3/8" Set At 6041' Packer At \_\_\_\_\_ Liner Run  Yes  No

Date of First, Resumed Production, SWD or Inj. \_\_\_\_\_ Producing Method  Flowing  Pumping  Gas Lift  Other (Explain) \_\_\_\_\_  
 Shut-in Waiting on Pipeline \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		1000 MCF/D			

Disposition of Gas:  Vented  Sold  Used on Lease  Open Hole  Perf.  Dually Comp.  Commingled

**METHOD OF COMPLETION**

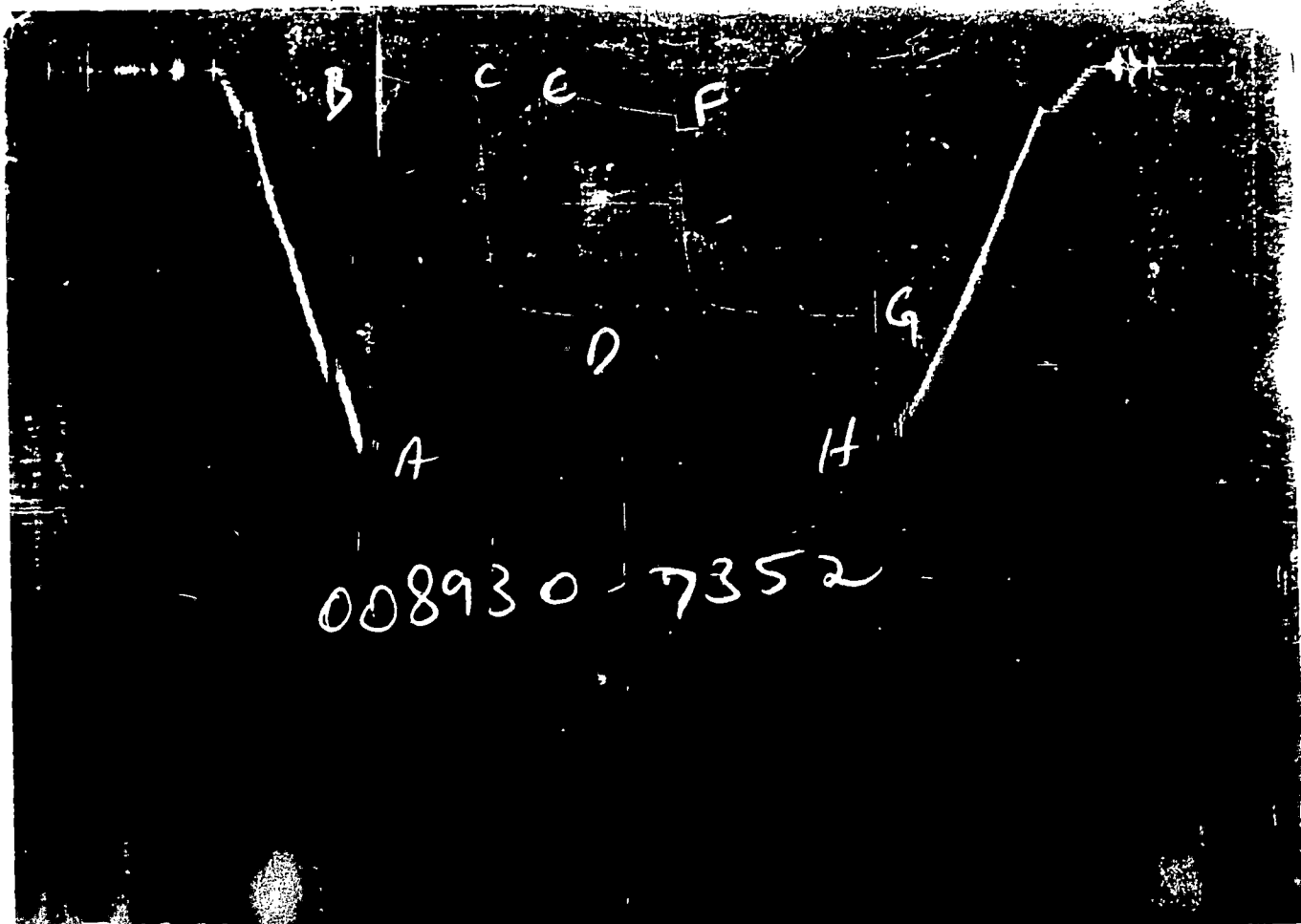
Production Interval \_\_\_\_\_

HARREL  
 LEASE NAME  
 2-5  
 WELL NO.  
 1  
 TEST NO.  
 4995.6 - 5029.0  
 TESTED INTERVAL  
 CABOT OIL AND GAS CORPORATION  
 LEASE OWNER/COMPANY NAME  
 LEGAL LOCATION  
 SEC. - TWP. - RANG. 5 - 33 S - 33 W  
 FIELD AREA  
 EVRLYN-CONDIT  
 COUNTY  
 SEWARD  
 STATE  
 KANSAS

**CABOT OIL AND GAS CORPORATION**  
  
 LEASE : HARREL  
 WELL NO. : 2-5  
 TEST NO. : 1

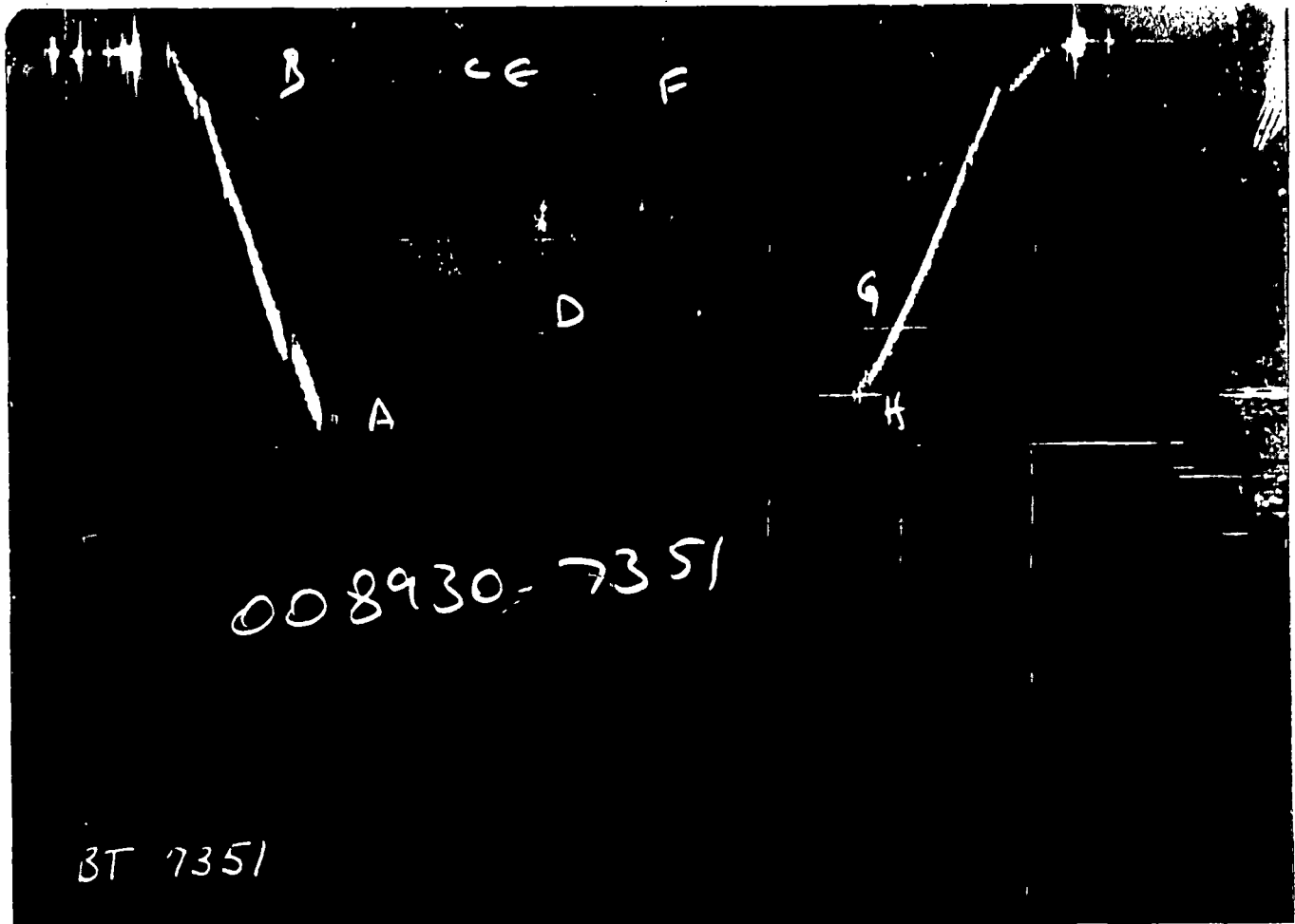
TICKET NO. 00893000  
 16-NOV-92  
 LIBERAL

RELEASED  
 MAR 1 1994  
 FROM CONFIDENTIAL



GAUGE NO: 7352 DEPTH: 4974.9 BLANKED OFF: NO HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2299	2319.4			
B	INITIAL FIRST FLOW	10	30.6	60.0	59.8	F
C	FINAL FIRST FLOW	186	181.9			
C	INITIAL FIRST CLOSED-IN	186	181.9	60.0	60.4	C
D	FINAL FIRST CLOSED-IN	1547	1560.3			
E	INITIAL SECOND FLOW	198	191.7	60.0	60.2	F
F	FINAL SECOND FLOW	302	301.7			
F	INITIAL SECOND CLOSED-IN	302	301.7	120.0	119.7	C
G	FINAL SECOND CLOSED-IN	1625	1571.1			
H	FINAL HYDROSTATIC	2299	2289.1			



GAUGE NO: 7351 DEPTH: 5025.7 BLANKED OFF: YES HOUR OF CLOCK: 12

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2326	2342.7			
B	INITIAL FIRST FLOW	55	49.9	60.0	59.8	F
C	FINAL FIRST FLOW	277	205.0			
C	INITIAL FIRST CLOSED-IN	277	205.0	60.0	60.4	C
D	FINAL FIRST CLOSED-IN	1574	1583.0			
E	INITIAL SECOND FLOW	216	220.2	60.0	60.2	F
F	FINAL SECOND FLOW	309	329.2			
F	INITIAL SECOND CLOSED-IN	309	329.2	120.0	119.7	C
G	FINAL SECOND CLOSED-IN	1587	1595.1			
H	FINAL HYDROSTATIC	2326	2307.1			

### EQUIPMENT & HOLE DATA

FORMATION TESTED: MARMATON  
 NET PAY (ft): 31.0  
 GROSS TESTED FOOTAGE: 33.4 PACKER TO T.D.  
 ALL DEPTHS MEASURED FROM: K.B.  
 CASING PERFS. (ft): \_\_\_\_\_  
 HOLE OR CASING SIZE (in): 7.875  
 ELEVATION (ft): 2835.0 AT KELLY BUSHING  
 TOTAL DEPTH (ft): 5029.0  
 PACKER DEPTH(S) (ft): 4990, 4996  
 FINAL SURFACE CHOKE (in): \_\_\_\_\_  
 BOTTOM HOLE CHOKE (in): 0.750  
 MUD WEIGHT (lb/gal): 8.90  
 MUD VISCOSITY (sec): 43  
 ESTIMATED HOLE TEMP. (°F): \_\_\_\_\_  
 ACTUAL HOLE TEMP. (°F): 109 @ 5024.1 ft

TICKET NUMBER: 00893000  
 DATE: 11-10-92 TEST NO: 1  
 TYPE DST: OPEN HOLE  
 FIELD CAMP: LIBERAL  
 TESTER: JEFF CLARK  
 WITNESS: CARL COWAN  
 DRILLING CONTRACTOR: H-40 DRILLING RIG #1

### FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
<u>PIT</u>	<u>0.320</u> @ <u>58</u> °F	<u>4496</u> ppm
<u>SAMPLER</u>	<u>0.045</u> @ <u>58</u> °F	<u>135365</u> ppm
<u>TDP</u>	_____ @ _____ °F	_____ ppm
<u>MIDDLE</u>	<u>0.100</u> @ <u>58</u> °F	<u>48452</u> ppm
<u>BOTTOM</u>	<u>0.040</u> @ <u>58</u> °F	<u>138861</u> ppm
_____	_____ @ _____ °F	_____ ppm

### SAMPLER DATA

Psig AT SURFACE: 310.0 ??  
 cu.ft. OF GAS: 0.320  
 cc OF OIL: 20.0  
 cc OF WATER: 1850.0  
 cc OF MUD: 20.0  
 TOTAL LIQUID cc: 1890.0

### HYDROCARBON PROPERTIES

OIL GRAVITY (°API): 37.8 @ 60 °F  
 GAS/OIL RATIO (cu.ft. per bbl): 2546  
 GAS GRAVITY: \_\_\_\_\_

### CUSHION DATA

TYPE	AMOUNT	WEIGHT
_____	_____	_____
_____	_____	_____

### RECOVERED :

- 1800 FT. OF GAS
- 150 FT. OF OIL AND GAS CUT MUD
- 180 FT. OF OIL AND GAS AND MUD CUT WATER
- 315 FT. OF GAS CUT WATER

MEASURED FROM TESTER VALVE

### REMARKS :

CHARTS INDICATE THIS WAS A MECHANICALLY SUCCESSFUL TEST. COMPLETE ANALYSIS TO DETERMINE RESERVOIR PARAMETERS WAS NOT PERFORMED DUE TO THE PRIMARY FLUID RECOVERED BEING WATER.



TICKET NO: 00893000  
 CLOCK NO: 28278 HOUR: 12

GAUGE NO: 7352  
 DEPTH: 4974.9

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	30.6			
2	3.0	38.9	8.3		
3	6.0	50.9	12.0		
4	9.0	61.2	10.3		
5	12.0	70.4	9.2		
6	15.0	81.1	10.8		
7	18.0	88.5	7.3		
8	21.0	96.0	7.5		
9	24.0	102.4	6.4		
10	27.0	110.2	7.8		
11	30.0	118.4	8.3		
12	33.0	125.8	7.3		
13	36.0	132.0	6.2		
14	39.0	138.2	6.2		
15	42.0	145.1	6.9		
16	45.0	151.5	6.4		
17	48.0	157.0	5.5		
18	51.0	162.4	5.5		
19	54.0	168.5	6.1		
20	57.0	174.1	5.6		
C 21	59.8	181.9	7.8		
FIRST CLOSED-IN					
C 1	0.0	181.9			
2	1.0	274.4	92.5	1.0	1.798
3	2.0	404.3	222.3	1.9	1.494
4	3.0	586.9	405.0	2.9	1.314
5	4.0	771.6	589.6	3.7	1.207
6	5.0	935.4	753.5	4.6	1.114
7	6.0	1066.3	884.4	5.5	1.038
8	7.0	1155.2	973.3	6.3	0.980
9	8.0	1233.4	1051.5	7.1	0.925
10	9.0	1287.8	1105.9	7.9	0.881
11	10.0	1325.3	1143.4	8.6	0.844
12	12.0	1386.0	1204.1	10.0	0.775
13	14.0	1426.5	1244.6	11.3	0.722
14	16.0	1450.1	1268.2	12.6	0.676
15	18.0	1468.3	1286.4	13.8	0.636
16	20.0	1482.8	1300.9	15.0	0.601
17	22.0	1494.3	1312.3	16.1	0.570
18	24.0	1504.7	1322.8	17.1	0.543
19	26.0	1511.9	1330.0	18.1	0.518
20	28.0	1517.4	1335.5	19.1	0.496
21	30.0	1523.1	1341.1	20.0	0.476
22	35.0	1533.5	1351.6	22.1	0.432
23	40.0	1541.4	1359.4	24.0	0.397
24	45.0	1547.6	1365.7	25.7	0.367
25	50.0	1552.2	1370.2	27.2	0.341
26	55.0	1556.5	1374.6	28.7	0.319
D 27	60.4	1560.3	1378.4	30.0	0.299

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW					
E 1	0.0	191.7			
2	3.0	199.7	8.0		
3	6.0	209.5	9.8		
4	9.0	214.5	5.0		
5	12.0	221.4	6.9		
6	15.0	229.0	7.6		
7	18.0	234.5	5.5		
8	21.0	240.9	6.4		
9	24.0	248.7	7.8		
10	27.0	255.2	6.6		
11	30.0	261.0	5.8		
12	33.0	266.5	5.5		
13	36.0	271.3	4.8		
14	39.0	276.0	4.7		
15	42.0	279.7	3.7		
16	45.0	283.5	3.7		
17	48.0	287.7	4.2		
18	51.0	291.9	4.2		
19	54.0	294.4	2.5		
20	57.0	297.8	3.4		
F 21	60.2	301.7	3.9		
SECOND CLOSED-IN					
F 1	0.0	301.7			
2	1.0	429.0	127.2	1.0	2.062
3	2.0	585.1	283.3	1.9	1.793
4	3.0	764.2	462.4	2.9	1.619
5	4.0	931.0	629.3	3.8	1.496
6	5.0	1070.1	768.4	4.8	1.401
7	6.0	1171.6	869.8	5.7	1.319
8	7.0	1239.6	937.8	6.7	1.256
9	8.0	1291.0	989.3	7.5	1.202
10	9.0	1331.2	1029.5	8.4	1.156
11	10.0	1359.1	1057.3	9.2	1.115
12	12.0	1402.2	1100.5	10.9	1.042
13	14.0	1437.6	1135.9	12.5	0.981
14	16.0	1460.6	1158.9	14.1	0.930
15	18.0	1475.3	1173.6	15.6	0.884
16	20.0	1485.9	1184.2	17.1	0.845
17	22.0	1495.0	1193.3	18.6	0.809
18	24.0	1501.8	1200.0	20.0	0.778
19	26.0	1508.3	1206.6	21.4	0.749
20	28.0	1514.1	1212.4	22.7	0.722
21	30.0	1518.3	1216.6	24.0	0.699
22	35.0	1527.6	1225.8	27.1	0.646
23	40.0	1534.9	1233.2	30.0	0.602
24	45.0	1540.9	1239.1	32.7	0.564
25	50.0	1544.8	1243.1	35.3	0.531
26	55.0	1548.7	1247.0	37.7	0.502
27	60.0	1550.9	1249.2	40.0	0.477

REMARKS:





TICKET NO: 00893000  
 CLOCK NO: 3301 HOUR: 12

















GAUGE NO: 7351  
 DEPTH: 5025.7

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
FIRST FLOW					
B 1	0.0	49.9			
2	3.0	59.0	9.1		
3	6.0	71.2	12.3		
4	9.0	81.4	10.2		
5	12.0	94.8	13.4		
6	15.0	104.7	9.9		
7	18.0	113.5	8.8		
8	21.0	120.3	6.9		
9	24.0	126.8	6.5		
10	27.0	134.3	7.5		
11	30.0	140.7	6.4		
12	33.0	147.7	7.0		
13	36.0	153.3	5.6		
14	39.0	159.8	6.5		
15	42.0	167.2	7.3		
16	45.0	173.9	6.7		
17	48.0	179.5	5.6		
18	51.0	185.7	6.2		
19	54.0	191.7	6.1		
20	57.0	198.4	6.7		
C 21	59.8	205.0	6.5		
FIRST CLOSED-IN					
C 1	0.0	205.0			
2	1.0	300.7	95.7	1.0	1.794
3	2.0	447.3	242.3	1.9	1.496
4	3.0	637.5	432.5	2.9	1.320
5	4.0	836.3	631.3	3.7	1.207
6	5.0	1013.2	808.2	4.6	1.115
7	6.0	1130.1	925.1	5.5	1.039
8	7.0	1214.0	1009.0	6.2	0.981
9	8.0	1277.3	1072.3	7.0	0.930
10	9.0	1332.7	1127.7	7.8	0.883
11	10.0	1370.2	1165.3	8.5	0.845
12	12.0	1421.4	1216.4	10.0	0.778
13	14.0	1457.6	1252.6	11.3	0.722
14	16.0	1478.4	1273.5	12.6	0.676
15	18.0	1494.5	1289.5	13.8	0.636
16	20.0	1506.5	1301.6	15.0	0.601
17	22.0	1517.7	1312.8	16.1	0.570
18	24.0	1525.9	1321.0	17.1	0.543
19	26.0	1533.8	1328.8	18.1	0.518
20	28.0	1539.6	1334.6	19.1	0.496
21	30.0	1545.2	1340.2	20.0	0.476
22	35.0	1556.2	1351.3	22.1	0.432
23	40.0	1564.4	1359.5	24.0	0.397
24	45.0	1570.9	1365.9	25.7	0.367
25	50.0	1576.0	1371.0	27.2	0.341
26	55.0	1580.5	1375.5	28.6	0.319
D 27	60.4	1583.0	1378.1	30.0	0.299

REF	MINUTES	PRESSURE	AP	$\frac{t \times \Delta t}{t + \Delta t}$	$\log \frac{t + \Delta t}{\Delta t}$
SECOND FLOW					
E 1	0.0	220.2			
2	3.0	223.5	3.3		
3	6.0	234.1	10.5		
4	9.0	239.0	4.9		
5	12.0	245.6	6.5		
6	15.0	251.6	6.1		
7	18.0	258.8	7.2		
8	21.0	266.0	7.2		
9	24.0	273.3	7.3		
10	27.0	279.5	6.2		
11	30.0	285.9	6.4		
12	33.0	290.9	4.9		
13	36.0	296.3	5.4		
14	39.0	301.1	4.8		
15	42.0	305.1	4.0		
16	45.0	309.2	4.1		
17	48.0	313.8	4.6		
18	51.0	318.0	4.1		
19	54.0	321.0	3.0		
20	57.0	324.2	3.2		
F 21	60.2	329.2	4.9		
SECOND CLOSED-IN					
F 1	0.0	329.2			
2	1.0	440.1	110.9	1.0	2.099
3	2.0	575.0	245.9	2.0	1.789
4	3.0	732.3	403.1	2.9	1.619
5	4.0	885.7	556.5	3.8	1.496
6	5.0	1037.9	708.7	4.8	1.397
7	6.0	1156.4	827.2	5.7	1.321
8	7.0	1240.0	910.8	6.6	1.259
9	8.0	1300.9	971.7	7.5	1.202
10	9.0	1344.7	1015.5	8.4	1.156
11	10.0	1377.5	1048.4	9.2	1.119
12	12.0	1424.0	1094.9	10.9	1.041
13	14.0	1459.3	1130.2	12.5	0.981
14	16.0	1483.6	1154.4	14.1	0.930
15	18.0	1498.6	1169.5	15.6	0.889
16	20.0	1510.3	1181.2	17.1	0.845
17	22.0	1519.7	1190.5	18.6	0.809
18	24.0	1526.4	1197.2	20.0	0.778
19	26.0	1533.0	1203.8	21.3	0.750
20	28.0	1538.7	1209.6	22.7	0.723
21	30.0	1542.9	1213.8	24.0	0.699
22	35.0	1551.6	1222.4	27.1	0.646
23	40.0	1559.6	1230.4	30.0	0.601
24	45.0	1565.2	1236.1	32.7	0.564
25	50.0	1569.7	1240.6	35.3	0.531
26	55.0	1573.3	1244.1	37.7	0.503
27	60.0	1576.9	1247.8	40.0	0.477

REMARKS:

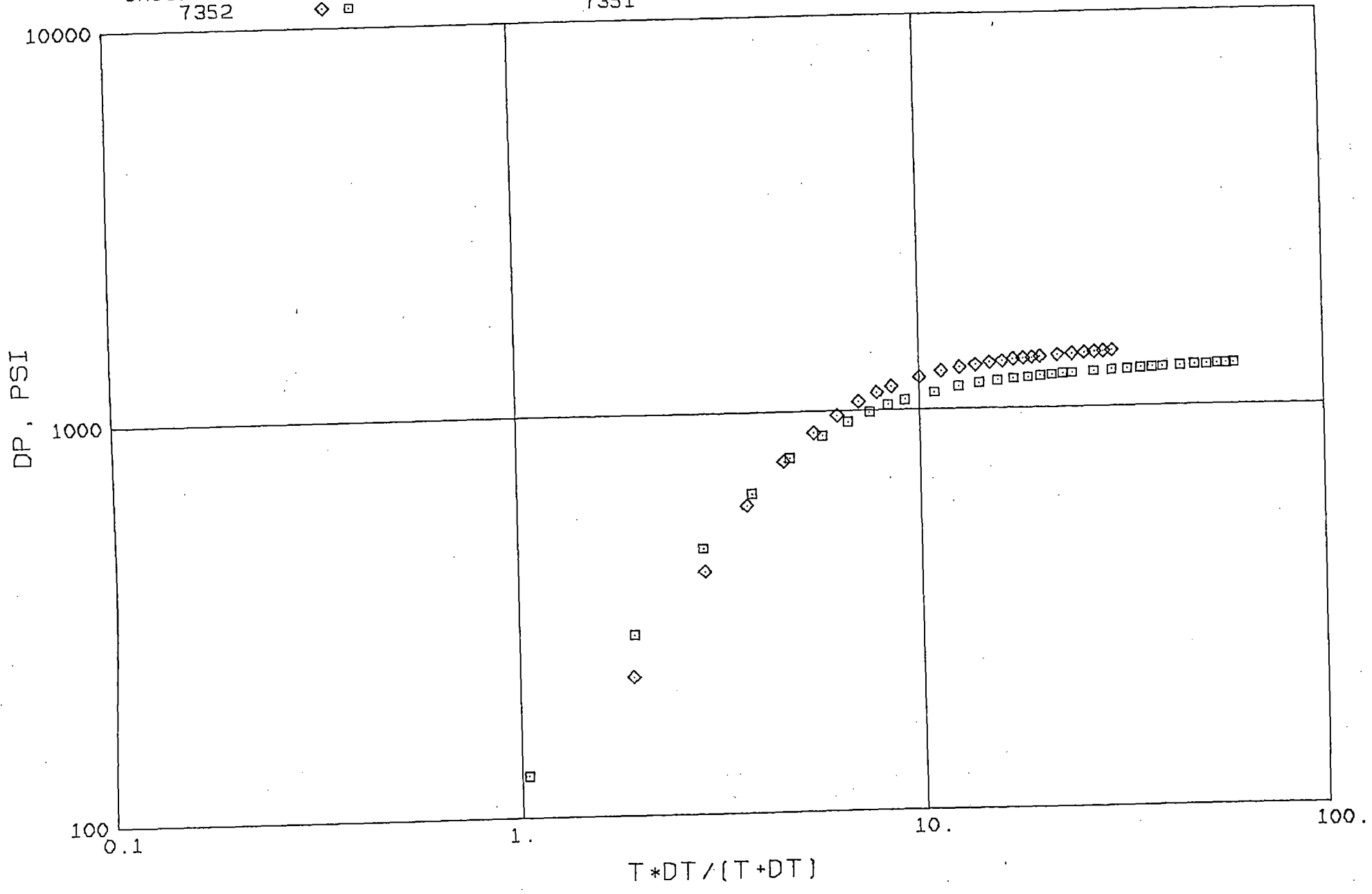


		O.D.	I.D.	LENGTH	DEPTH	
1		DRILL PIPE.....	4.500	3.826	4327.8	
3		DRILL COLLARS.....	6.250	2.250	566.1	
50		IMPACT REVERSING SUB.....	6.000	3.000	1.3	4894.5
3		DRILL COLLARS.....	6.250	2.250	59.4	
5		CROSSOVER.....	6.000	2.250	1.0	
11		HANDLING SUB & CHOKE ASSEMBLY...	4.500	3.500	4.7	
13		DUAL CIP SAMPLER.....	5.000	0.750	8.6	
60		HYDROSPRING TESTER.....	5.000	0.750	5.0	4972.8
80		AP RUNNING CASE.....	5.000	2.250	4.1	4974.9
15		JAR.....	5.000	1.750	5.0	
16		VR SAFETY JOINT.....	5.000	1.000	2.8	
70		OPEN HOLE PACKER.....	6.750	1.530	5.8	4989.8
70		OPEN HOLE PACKER.....	6.750	1.530	5.8	4995.6
20		FLUSH JOINT ANCHOR.....	5.000	2.370	26.0	
83		HT-500 TEMPERATURE CASE.....	5.000		1.5	5024.1
81		BLANKED-OFF RUNNING CASE.....	5.000		4.1	5025.7
TOTAL DEPTH						5029.0

EQUIPMENT DATA

GAUGE NO CIP 1 2  
7352    ◊ ◻

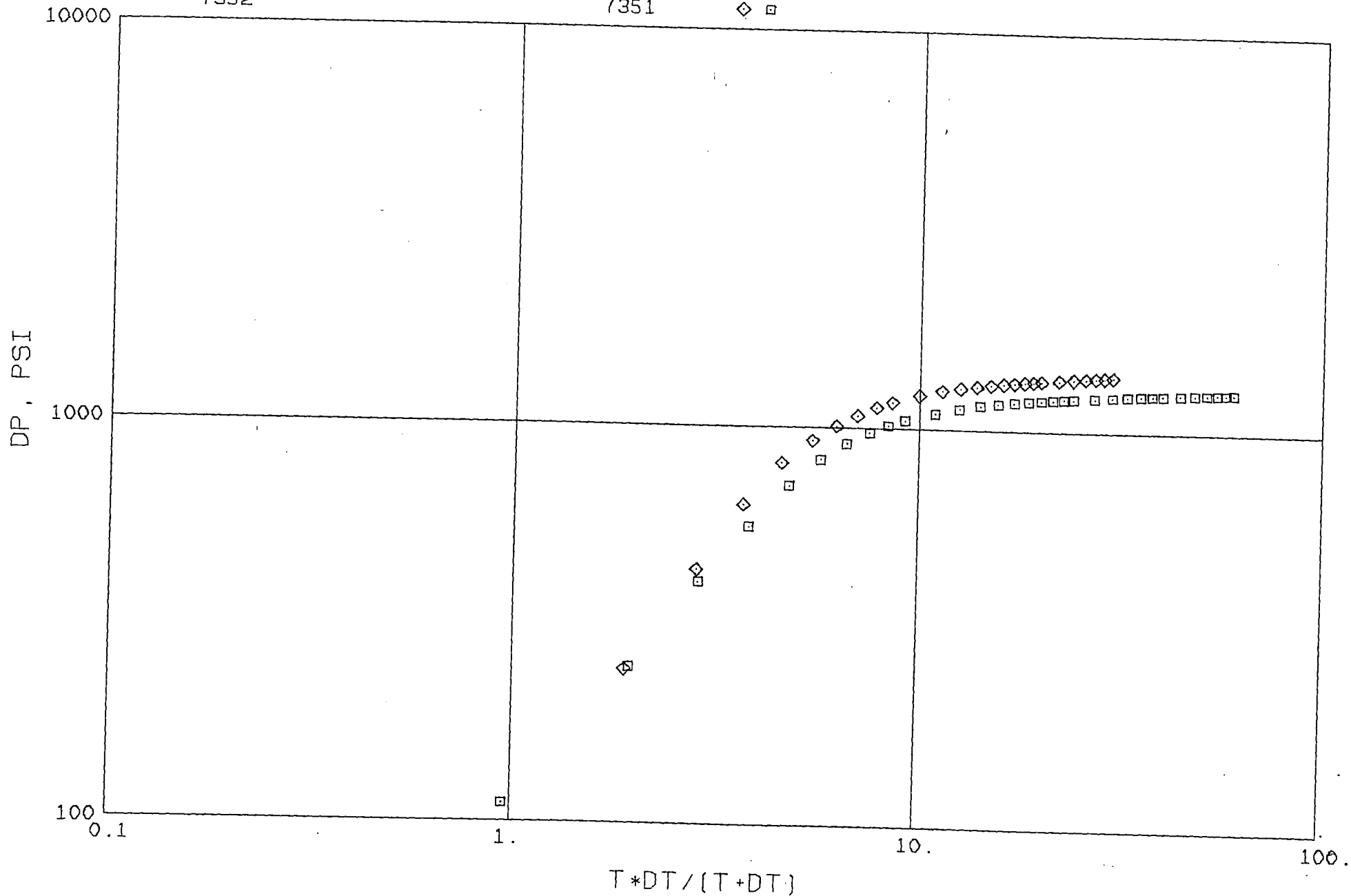
GAUGE NO CIP 1 2  
7351



GAUGE NO CIP 1 2  
7352

GAUGE NO CIP 1 2  
7351

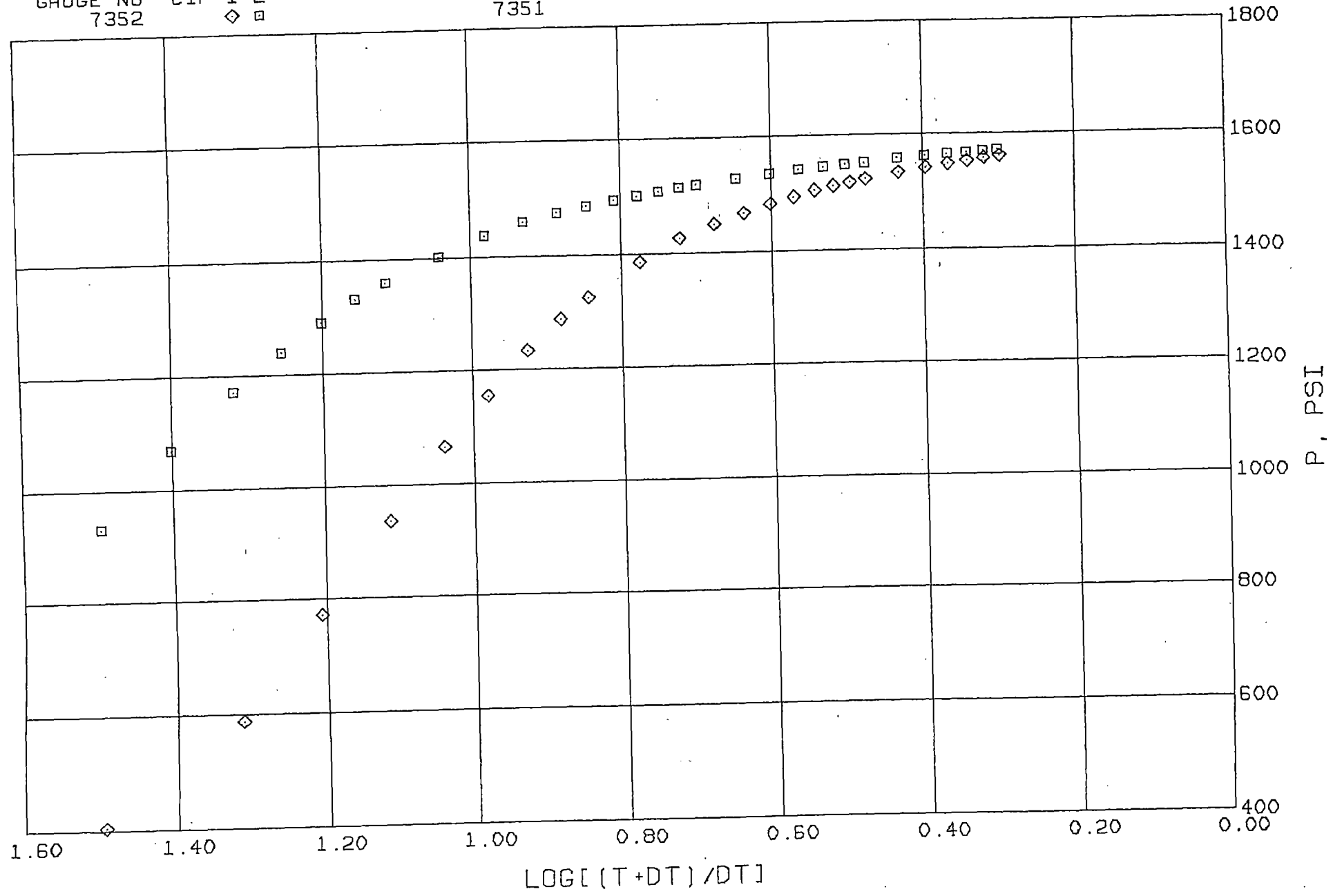
TICKET NO 00893000



TICKET NO 00893000

GAUGE NO CIP 1 2  
7352     ◇ □

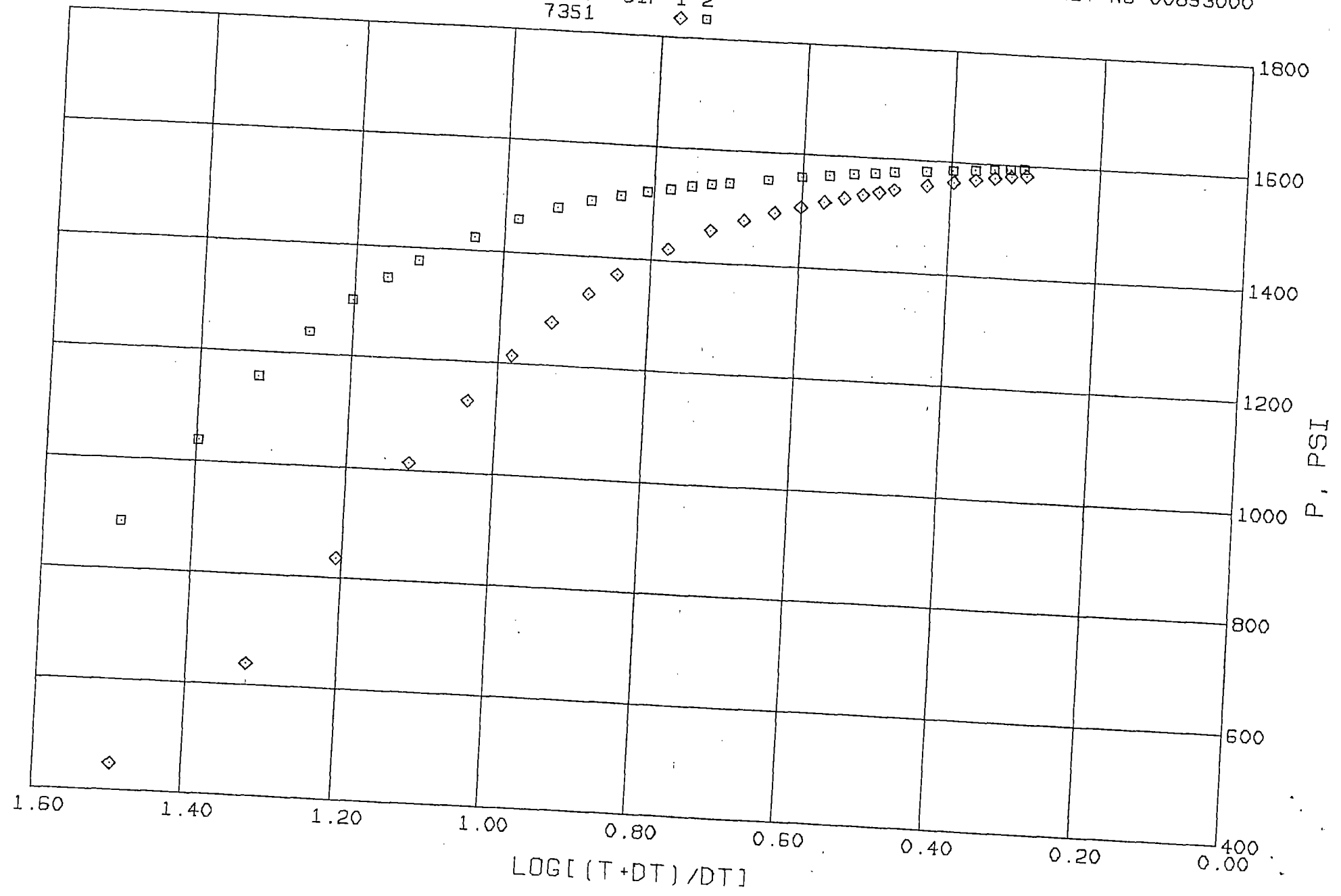
GAUGE NO CIP 1 2  
7351



GAUGE NO CIP 1 2  
7352

GAUGE NO CIP 1 2  
7351  $\diamond$   $\square$

TICKET NO 00893000





HALLIBURTON SERVICES

NO. 304004

A Division of Halliburton Company

FORM 1000-B-11

WELL NO. - FARM OR LEASE NAME <b>HARREL 1-5</b>		COUNTY <b>SEWARD</b>	STATE <b>Ks</b>	CITY / OFFSHORE LOCATION	DATE <b>11-5-92</b>
CHARGE TO <b>CAROT OIL &amp; GAS</b>		OWNER <b>Carot</b>	MATERIAL TYPE (CHECK ONE) SERVICE <input checked="" type="checkbox"/> SALES <input type="checkbox"/>		REFERRAL JOB YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
ADDRESS <b>7401 N Broadway Suite 600</b>		CONTRACTOR <b>H-10</b>	LOCATION 1 <b>1</b>		CODE <b>1000</b>
CITY, STATE, ZIP <b>Omaha Ne 68105</b>		SHIPPED VIA <b>Trucking</b>	FREIGHT CHARGES FOC <input type="checkbox"/> COLLECT <input type="checkbox"/>		LOCATION 2 <b>2</b>
WELL TYPE <b>01</b>		WELL CATEGORY <b>01</b>	WELL PERMIT NO. <b>B-122199</b>		LOCATION 3 <b>3</b>
TYPE AND PURPOSE OF JOB <b>Oil</b>		ORDER NO.	REFERRAL LOCATION		

An acknowledgment of the above-mentioned conditions is required with the order and series stated in Halliburton's current price lists, to be payable NET by the 30th of the following month after date of invoice. Payment conditions are subject to Halliburton's approval for the last day of the month following the month in which the invoice is issued. Payment must be received by the 30th of the following month after date of the invoice. Payment conditions are subject to Halliburton's approval for the last day of the month following the month in which the invoice is issued. Payment must be received by the 30th of the following month after date of the invoice. Payment conditions are subject to Halliburton's approval for the last day of the month following the month in which the invoice is issued. Payment must be received by the 30th of the following month after date of the invoice.

Halliburton warrants only the life of its products, materials and services, and that the same are free from defects in material and workmanship. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE WHICH EXTENDS BEYOND THOSE STATED IN THE SPECIFICATIONS AND INSTRUCTIONS. HALLIBURTON'S LIABILITY AND OBLIGATION IS LIMITED TO THE EXTENT OF THE CONTRACT. HALLIBURTON SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE OR CONSEQUENTIAL DAMAGES. HALLIBURTON SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE OR CONSEQUENTIAL DAMAGES.

ITEM NO.	QUANTITY	UNIT	DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT
				QTY	MEAS	QTY	MEAS		
010-177			MILEAGE	12	MI			2.10	25.20
001-016			Pumpup Service	2	HR	1542'			120.00
030-012			5-4 Top Pul	1	HR	85"			150.00
160	020-2171		SHINE SHOE	1	HR	85"			161.00
210	015-19502		LOGSPT PUMP	1	HR	85"			171.00
27	015-19445		FULLUP	1	HR	85"			20.00
40	007-91057		CONTRACTOR	1	HR	85"	1200		270.00
66	007-14056		ELECTRIC	1	HR	85"			75.75
320	002-0085		BALLET	1	HR	85"			152.00

FEB 12

CONFIDENTIAL RECEIVED STATE CORPORATION COMMISSION

FEB 16 1993

CONSERVATION DIVISION Wichita, Kansas

RELEASED

MAR 11 1994

FROM CONFIDENTIAL

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO.

B-122199

8278 26

IS JOB SATISFACTORILY COMPLETED \_\_\_\_\_

IS OPERATION OF EQUIPMENT SATISFACTORY? \_\_\_\_\_

IS PERFORMANCE OF PERSONNEL SATISFACTORY? \_\_\_\_\_

**Carl Cowan**  
CUSTOMER OR HIS AGENT (PLEASE PRINT)

**Carl Cowan**  
CUSTOMER OR HIS AGENT (SIGNATURE)

WE CERTIFY THAT THE FIRM LISTS OPERATES ANY OF 1990, AND OPERATES HAS BEEN COMPLIANT WITH THE PROVISIONS OF 80005 AND OR WITH RESPECT TO SERVICES FURNISHED UNDER THIS CONTRACT.

**Carl Cowan**  
HALLIBURTON OPERATOR

HALLIBURTON APPROVAL \_\_\_\_\_

FIELD OFFICE

SUB TOTAL **10,229.51**

APPLICABLE TAXES WILL BE ADDED ON INVOICE

HALLIBURTON SERVICE

**AND  
TICKET CONTINUATION**

FOR INVOICES AND  
TICKET NO.

34/100

DATE <b>11-05-92</b>	CUSTOMER ORDER NO.	WELL NO. AND FARM <b>Harrol 1-3</b>	COUNTY <b>Boonville</b>	STATE <b>Kansas</b>
CHARGE TO <b>Colony Oil &amp; Gas</b>		OWNER <b>Colony</b>	CONTRACTOR <b>E-40</b>	No. <b>B 122699</b>
MAILING ADDRESS		DELIVERED FROM <b>Hogden, Ks</b>	LOCATION CODE <b>023335</b>	PREPARED BY <b>Mike Gilbert</b>
CITY & STATE		DELIVERED TO <b>H/ Liberal, Ks</b>	PHONE NO. <b>302-5309</b> <b>302-7-4515</b>	RECEIVED BY <b>Kussner</b>

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE	DESCRIPTION	LIMITS 1		LIMITS 2		UNIT PRICE	AMOUNT	
				QTY.	WEAR	QTY.	WEAR			
504-043	516.00272	2 H	Franklin Cement	150	02			8.44	1266	00
504-118		2 H	Halliburton Light Cement	675	02			7.66	5178	00
507-210	690.50071	2 H	Floata 104/ 025	200	10			1.20	240	00
507-406	690.50312	2 H	Colony Chloride 220/ 025	15	02			24.50	367	50
<p>FEB 12 CONFIDENTIAL</p>										
<p>RELEASED MAY 11 1994 FROM CONFIDENTIAL</p>										
<p>RECEIVED STATE CORPORATION COMMISSION FEB 16 1993 CONSERVATION DIVISION Wichita, Kansas</p>										
300-207		2 H	SERVICE CHARGE					CU. FEET 869	1.15	999 35
500-206		2 H	Mileage Charge	77,721	05			CU. FEET 971.3125	0.00	999 31

No. <b>B 122699</b>	CARRY FORWARD TO INVOICE	SUB-TOTAL	<b>6575 34</b>
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WORK ORDER CONTRACT AND PRE-TREATMENT DATA

FORM 1008 RT

A Division of Halliburton Company

ATTACH TO INVOICE & TICKET NO. 20104

DISTRICT IRRAW DATE 11-5-92

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO: LAST OIL & GAS (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICES

WELL NO. 15 LEASE SAWEL SEC. 1 TWP. 15N RANGE 15E

FIELD SEAMA COUNTY SEAMA STATE KS OWNED BY LAST OIL & GAS

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_  
FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_  
SACRIF TYPE \_\_\_\_\_ SET AT \_\_\_\_\_  
TOTAL DEPTH \_\_\_\_\_ MUD WEIGHT FEB 12  
BORE HOLE \_\_\_\_\_ CONFIDENTIAL  
INITIAL PROD: OR EPD, H<sub>2</sub>O \_\_\_\_\_ EPD, GAS \_\_\_\_\_ MCF \_\_\_\_\_  
PRESENT PROD: OIL EPD, H<sub>2</sub>O \_\_\_\_\_ EPD, GAS \_\_\_\_\_ MCF \_\_\_\_\_

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX ALLOW IN P.S.I.
CASING	<u>N</u>	<u>2 1/2</u>	<u>25</u>	<u>12</u>	<u>1523</u>	
LINER						
TUBING						
OPEN HOLE			<u>12 1/2</u>	<u>12</u>	<u>1523</u>	<u>5000 FT.</u>
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

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

TREATMENT INSTRUCTIONS: TREAT THRU TUBING  ANNULUS  CASING  TUBING/ANNULUS  HYDRAULIC HORSEPOWER ORDERED  
Last Oil & Gas of 675<sup>th</sup> Prairie Ave. of 22<sup>nd</sup> St. of Kansas - 150 SC  
Prairie of 22<sup>nd</sup> St. of Kansas - Disposal of 1/2<sup>nd</sup>

RELEASED

MAR 1 1993

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 FROM CONFIDENTIAL

- 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. Upon Customer's default, payment of Customer's account by the last day of the month following the month in which the invoice is dated. Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ attorneys to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.
- 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 for:
  - Damage to property owned by, in the possession of, or leased by Customer, and/or the well owner (if different from Customer), including, but not limited to, surface and subsurface damage. The term "well owner" shall include working and royalty interest owners.
  - Reservoir, formation, or well loss or damage, subsurface, (seepage or any action in the nature thereof).
  - Personal injury or death or property damage (including, but not limited to, damage to the reservoir, formation or well), or any damages whatsoever, growing out of or in any way connected with or resulting from pollution, subsurface pressure, losing control of the well and/or a well blowout or the use of radioactive material.

The defense, indemnity, release and hold harmless obligations of Customer provided for in this Section (b) and Section (c) below shall apply to claims or liability even if caused or contributed to by Halliburton's negligence, strict liability, or the unseaworthiness of any vessel owned, operated, or furnished by Halliburton or any defect in the data, products, supplies, materials, or equipment of Halliburton whether in the preparation, design, manufacture, distribution, or marketing thereof, or from a failure to warn any person of such defect. Such defense, indemnity, release and hold harmless obligations of Customer shall not apply where the claims or liability are caused by the gross negligence or willful misconduct of Halliburton. The term "Halliburton" as used in said Sections (b) and (c) shall mean Halliburton, its divisions, subsidiaries, parent and affiliated companies, and the officers, directors, employees, agents and servants of all of them.
- c) That because of the uncertainty of variable well conditions and the necessity of relying on tests and engineering 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, log recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and Customer shall indemnify Halliburton against any damages arising from the use of such information.
- d) That Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship ~~IN HEREBY~~ THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's 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 or use of any products, supplies or materials is limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items, in no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
- 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. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
- f) To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
- g) That this contract shall be governed by the law of the state where services are performed or materials are furnished.
- h) That Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

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: Carl Cotton CUSTOMER

DATE: 11-5-92

TIME: 0940 A.M. P.M.

To certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the valuation of goods and/or with respect to services furnished under this contract.

FIELD OFFICE



CHART NO.	TIME	RATE (EPM)	VOLUME (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0500							Run
	0710							On location. Run up. Standby D.P.
	0810							Run RF Casing
	0940							Change in Hook up To Mid Pump
	0950							Mid Casing
	1005							Set Mid Pump Down. Hook up To Cat Line
	1010	7	257			250		Pump Lead Survey @ 12.4" - Gas Return
	1040	6	25			250		Pump Tail Survey @ 1 - "
	1045							Set Down To Deep Top Pick
	1046	6				50		Display
	1100	6-2	22			50/100		Slow Rate
	1105		14			50/100		Pump Down. Reattach Pipe. First Gas Received From Location
								* Cat To Surface
								FEB 12
								CONFIDENTIAL

RECEIVED  
STATE CORPORATION COMMISSION  
FEB 16 1993  
CONSERVATION DIVISION  
Wichita, Kansas

RELEASED  
MAR 11 1994  
FROM CONFIDENTIAL







# AND TICKET CONTINUATION

FOR INVOICE AND  
TICKET NO.

25044

DATE <b>11-15-92</b>	CUSTOMER ORDER NO.	WELL NO. AND FARM <b>Marshall 1-5</b>	COUNTY <b>Woodward</b>	STATE <b>Ko.</b>
CHARGE TO <b>Robot Oil &amp; Gas</b>		OWNER <b>Robot</b>	CONTRACTOR <b>E-10</b>	<b>B 122734</b>
MAILING ADDRESS		DELIVERED FROM <b>Wagoner, Ko.</b>	LOCATION CODE <b>023335</b>	PREPARED BY <b>Facilities</b>
CITY & STATE		DELIVERED TO <b>B Sublette, Ko.</b>	TRUCK NO.	RECEIVED BY <b>Exp/SAFE</b>

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE	DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT	
				QTY.	MEAS.	QTY.	MEAS.			
			<b>500 gal 50/50 Fog</b>							
<del>504-043</del>	<del>516.00272</del>	<del>20</del>	<del>Producers Cement</del>	<del>250</del>	<del>qt</del>			<del>8.45</del>	<del>2110 00</del>	
<del>504-052</del>	<del>516.00286</del>	<del>20</del>	<del>Fog</del>	<del>250</del>	<del>qt</del>			<del>.664</del>	<del>164 00</del>	
<del>504-121</del>	<del>516.00259</del>	<del>20</del>	<del>Oil</del>	<del>5</del>	<del>qt</del>			<del>14.75</del>	<del>73 75</del>	
<del>504-120</del>			<del>Halliburton Light Cement Frost</del>	<del>350</del>	<del>qt</del>			<del>7.87</del>	<del>2755 20</del>	
<del>504-050</del>	<del>516.00256</del>									
<del>506-101</del>	<del>516.00256</del>									
<del>504-121</del>	<del>516.00259</del>									
<del>507-210</del>	<del>890.50071</del>		<del>Wagoner 0 1/2 in 360 qt 51a</del>	<del>90</del>	<del>lb</del>			<del>1.30</del>	<del>117 00</del>	
<del>507-775</del>	<del>516.00144</del>		<del>Wagoner 0 3/4 in 500 qt Fog</del>	<del>210</del>	<del>lb</del>			<del>6.36</del>	<del>1335 60</del>	
<del>507-970</del>	<del>70.13764</del>		<del>Wagoner 0 1/2 in 500 qt Fog</del>	<del>84</del>	<del>lb</del>			<del>2.95</del>	<del>247 80</del>	
<del>508-291</del>	<del>516.00-37</del>		<del>Wagoner 0 1/2 in 500 qt Fog</del>	<del>200</del>	<del>lb</del>			<del>.35</del>	<del>70 00</del>	
<del>508-292</del>	<del>516.00318</del>		<del>Wagoner 0 1/2 in 500 qt Fog</del>	<del>200</del>	<del>lb</del>			<del>.30</del>	<del>60 00</del>	
FEB 12										
CONFIDENTIAL										
RELEASED										
MAR 11 1994										
FROM CONFIDENTIAL										
		Required Mileage Charge	TOTAL WEIGHT	LOADED MILES	TON MILES					
			SERVICE CHARGE ON MATERIALS RETURNED		CU. FEET					
<del>500-207</del>			SERVICE CHARGE		CU. FEET 1028		1.15		1182 20	
<del>500-306</del>		Mileage Charge	86 276 TOTAL WEIGHT	15 LOADED MILES	TON MILES 539.57		.80		511 66	
No. <b>B 122734</b>		CARRY FORWARD TO INVOICE				SUB-TOTAL				<b>12464 06</b>

HALLIBURTON SERVICES

WORK ORDER CONTRACT AND PRE-TREATMENT DATA

ATTACH TO INVOICE & TICKET NO. 251068

DATE 1992 R-7 A Division of Halliburton Company

DISTRICT LIBERAL, KS

DATE 11-16-92

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

WELL NO. 1-5 LEASE HARREN SEC 5 TWP 33 RANGE 30W

FIELD Seward COUNTY KS OWNED BY Cabot

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME TYPE FROM TO CORE TYPE SET AT VITAL DEPTH MUD WEIGHT FEB 12 CORE HOLE VITAL PROD. CR EPD, H2O EPD, GAS MCF REPERM PROD. CR EPD, H2O EPD, GAS MCF

Table with columns: CASINGS, LINER, TUBING, OPEN HOLE, PERFORATIONS. Includes handwritten data: N, 15.5, 5 1/2, KB, 675, 7 1/2, 6485, 2701.

RELEASED

REWORK TREATMENT: DATE TYPE MATERIALS

TREATMENT INSTRUCTIONS: TREAT THIRD TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED CEMENT 2 stage 5 1/2 HAS STAINING -

MAR 1 1 1994

FROM CONFIDENTIAL

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 Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials.
d) That the 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.
e) To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
f) That this contract shall be governed by the law of the state where services are performed or materials are furnished.
g) That Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

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 11-16-92

certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the location of goods and/or with respect to services furnished under this contract.

TIME A.M. P.M.

FIELD OFFICE



**SUMMARY**

Wichita, KS

**WELL DATA**

FIELD: 33 SECTION: 33W COUNTY: SEWARD STATE: KS

FORUMER NAME: \_\_\_\_\_ TYPE: \_\_\_\_\_

FORMATION THICKNESS: FROM \_\_\_\_\_ TO \_\_\_\_\_

INITIAL PRODUCE: OIL \_\_\_\_\_ SPD. WATER \_\_\_\_\_ SPD. GAS \_\_\_\_\_

PRESENT PRODUCE: OIL \_\_\_\_\_ SPD. WATER \_\_\_\_\_ SPD. GAS \_\_\_\_\_

COMPLETION DATE: \_\_\_\_\_ MUD TYPE: \_\_\_\_\_ MUD WT: \_\_\_\_\_

SPRINKER TYPE: \_\_\_\_\_ SET AT: 0.75

BOTTOM HOLE TEMP: \_\_\_\_\_ PRESSURE: \_\_\_\_\_

LOG DATA: \_\_\_\_\_ TOTAL DEPTH: \_\_\_\_\_

**TOOLS AND ACCESSORIES**

TYPE AND SIZE	QTY	MAKE
FLOAT COLLAR <u>4 1/2" 5000</u>	<u>1</u>	<u>Halliburton</u>
FLOAT SHOE <u>4 1/2" 5000</u>	<u>1</u>	<u>Halliburton</u>
GUIDE SHOE		
CENTRALIZERS <u>3 1/2"</u>	<u>30</u>	
DOFFER-PULL		
SPACER		
SEAL		
WASHER		
OTHER		

**MATERIALS**

REAT FLUID: \_\_\_\_\_ DENSITY: \_\_\_\_\_ LBRAL API

MOFL FLUID: \_\_\_\_\_ DENSITY: \_\_\_\_\_ LBRAL API

FOUR TYPE: \_\_\_\_\_ SIZE: \_\_\_\_\_

CID TYPE: \_\_\_\_\_ GAL

CEMENT AGENT: \_\_\_\_\_ IN

WATER: \_\_\_\_\_ IN

LIQUID LOSS AGENT: \_\_\_\_\_ IN

SEALING AGENT: \_\_\_\_\_ IN

REL. PRES. AGENT TYPE: \_\_\_\_\_ IN

SEALER TYPE: \_\_\_\_\_ GAL/LB

LOCKING AGENT TYPE: \_\_\_\_\_ GAL/LB

DIS-PAC BALLS TYPE: \_\_\_\_\_ QTY: \_\_\_\_\_

OTHER: \_\_\_\_\_

**JOB DATA**

CALLED OUT: DATE 11-15-92 TIME 2:25

ON LOCATION: DATE 11-15-92 TIME 2:45

JOB STARTED: DATE 11-15-92 TIME 11:15

JOB STOPPED: DATE 11-15-92 TIME 11:15

**PERSONNEL AND SERVICE UNITS**

NAME	UNIT NO. & TYPE
<u>FRANCIS</u>	<u>02073</u>
<u>BRADY</u>	<u>04604</u>
<u>McINTYRE</u>	<u>07704</u>
<u>WEECE</u>	<u>87106</u>
<u>WEL</u>	<u>04550</u>

DEPARTMENT: Cement

DESCRIPTION OF JOB: 2-stage 5% long string

JOB DONE THRU: TUBING  CASING  ANNULUS  OTHER

CUSTOMER REPRESENTATIVE: Carl Cowan

HALLIBURTON OPERATOR: FRANCIS

CORRECTION REQUESTED: \_\_\_\_\_

**CEMENT DATA**

STAGE	NUMBER OF BAGS	CEMENT	BRAND	MILK RACKED	ADDITIVES	FIELD CEMENT	WATER
<u>1</u>	<u>875</u>	<u>5/8 Premium</u>	<u>Ra</u>	<u>B</u>	<u>10% Salt, 10% Gelside, 1/2 D-Ad, 1/2 H-Ad-302</u>	<u>7.5</u>	<u>13.5</u>
<u>2</u>	<u>360</u>	<u>Premium Plus</u>	<u>HR</u>	<u>B</u>	<u>10% Floccs</u>	<u>1.05</u>	<u>17.5</u>
	<u>175</u>	<u>5/8 Premium</u>	<u>Ra</u>	<u>B</u>	<u>10% Salt, 10% Gelside, 1/2 D-Ad, 1/2 H-Ad-302</u>	<u>1.5</u>	<u>17.5</u>

**PRESSURES IN PSI**

REGULATING: \_\_\_\_\_ DISPLACEMENT: \_\_\_\_\_

BEAKDOWN: \_\_\_\_\_ MAXIMUM: \_\_\_\_\_

PERAGE: \_\_\_\_\_ FRACTURE GRADIENT: \_\_\_\_\_

HYDRAULIC HORSEPOWER: \_\_\_\_\_

DESIGN: \_\_\_\_\_ AVAILABLE: \_\_\_\_\_ USED: \_\_\_\_\_

AVERAGE RATES IN BPM: \_\_\_\_\_

CEMENT LEFT IN PIPE: 45

REASON: Shut In

**SUMMARY**

PRESLIME: 10/10 VOLUME: 10/15

LOAD & BKDN: \_\_\_\_\_ PAD: \_\_\_\_\_

TREATMENT: \_\_\_\_\_

CEMENT SLURRY: \_\_\_\_\_

TOTAL VOLUME: \_\_\_\_\_

REMARKS: 16 100%

RELEASED: MAR 1 1993

CONSERVATION DIVISION  
Wichita, Kansas

# JOB LOG

DEC 15 '92

11:28AM HALLIBURTON LIBERAL USE **MARREN**

TICKET NO. **251168** P. 11/11

CUSTOMER **Cabot O-1 + Gas**

PAGE NO.

FORM 2013 R-2

JOB TYPE **2-STAGE 5 1/2" ANY STAIN**

DATE **11-15-92**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	2100							Called
	2205							ON location - Rig 2000
	015							Ran 5 1/2" casing to 6195' w/ DV tool to 2901'
	0850							Casing in
	0900				FEB 2			Circulate w/ Rig
	0930				CONFIDENTIAL			Hook up Pump truck
	0940	6	10				250	Pump 10 BBL Superflush
	-	6	10				250	10 BBL Gel Water
	0938	6	87				200	315 st 5 1/2" PCL (10% salt, 12% Bitumite, -2% D-A-1, -5% Hald-322)
	0952							Shut Down - Deep Bottom Plug
	0953	6	70				150	Displace 70 BBL H2O
	0505	6	76				200	76 BBL Mud
	0528		146				70/50	Plug Down - Pressure Breaking back to top of 550 psi
							0	Release Pressure - Float Holding
	0535							Deep Opening Bomb
	0548						120	Open DV tool
	0555							Circulate w/ Rig Pump till 1130
	1125							Hook up TRUCK
	1135	6	10				200	Pump 10 BBL Superflush
	-	6	10				150	10 BBL Gel Water
	1138	6	181				150	360 st 5 1/2" PCL (10% salt, 12% Bitumite)
	-	6	47				150	175 st 5 1/2" PCL (10% salt, 12% Bitumite, -2% D-A-1, -5% Hald-322)
	1210							Shut Down - Deep Closing Plug
	1211	6					50	Displace
	1220	3	55				600	55 BBL out - Cement to surface
	1226		69				70/100	Plug Down
							0	Tool closed + 11/15/92

RELEASED

MAR 11 1994

FROM CONFIDENTIAL

RECEIVED  
STATE CORPORATION COMMISSION  
Jib [Signature]  
FEB 16 1993  
CONSERVATION DIVISION  
Wichita, Kansas