

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

ORIGINAL

API NO. 15- 175-21,291-0000

County Seward

NE - NW - SW - SE Sec. 17 Twp. 32S Rgs. 33 X E
W

2310 Feet from S X (circle one) Line of Section

990 Feet from W (circle one) Line of Section

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

Lease Name JOHNSON Well # 4-17

Field Name Angman South

Producing Formation Morrow

Elevation: Ground 2712' KB 2723'

Total Depth 5850' PBDT 5430'

Amount of Surface Pipe Set and Cemented at 1528' Feet

Multiple Stage Cementing Collar Used? Yes X No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan DLT 1 4-20-93
(Data must be collected from the Reserve Pit)

Chloride content 5000 ppm Fluid volume 11000 bbls

Dewatering method used Evaporate, De-water & Backfill

Location of fluid disposal if hauled offsite: _____

RELEASED

Operator Name _____

Lease Name _____ License No. APR 2 8 1994

Quarter Sec. _____ FROM CONFIDENTIAL

County _____ Docket No. _____

Operator: License # 6120

Name: Cabot Oil & Gas Corporation

Address 9400 N. Broadway, Suite 608

City/State/Zip Oklahoma City, OK 73114

Purchaser: Cabot Oil & Gas Marketing Corp.

Operator Contact Person: Jim R. Pendergrass

Phone (405) 478-6514

APR 2

Contractor: Name: H-40 Drilling

CONFIDENTIAL

License: 30692

Wellsite Geologist: _____

Designate Type of Completion
X New Well _____ Re-Entry _____ Workover _____

_____ Oil _____ SWD _____ SIOW _____ Temp. Abd.

X Gas _____ ENHR _____ SIGW _____

_____ Dry _____ Other (Core, WSW, Expl., Cathodic, etc) _____

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

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

_____ Deepening _____ Re-perf. _____ Conv. to Inj/SWD _____

_____ Plug Back _____ PBDT _____

_____ Commingled _____ Docket No. _____

_____ Dual Completion _____ Docket No. _____

_____ Other (SWD or Inj?) _____ Docket No. _____

12/11/92 12/20/92 2/18/93

Spud Date _____ Date Reached TD _____ Completion Date _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Jim R. Pendergrass _____

Title Drilling Superintendent _____ Date 4/2/93

Subscribed and sworn to before me this 2nd day of April, 19 93.

Notary Public Connie B. Turner _____

Date Commission Expires September 2, 1996

4-9-93

K.C.C. OFFICE USE ONLY	
F	Letter of STATE CORPORATION COMMISSION Attached
C	Wireline Log Received
C	Geologist Report Received
APR 9 1993	
Distribution	
<input checked="" type="checkbox"/>	KCC
<input type="checkbox"/>	KGS
<input type="checkbox"/>	CONSERVATION DIVISION
<input type="checkbox"/>	Plug
<input type="checkbox"/>	Wichita, Kansas
<input type="checkbox"/>	Other
(Specify)	

Operator Name Cabot Oil & Gas Corporation

Lease Name JOHNSON

Well # 4-17

Sec. 17 Twp. 32S Rge. 33

East
 West

County Seward

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:
DIL/GR
SDL/DSN/GR
Microlog

Log		Formation (Top), Depth and Datum	Sample
Name	Top	Datum	
Herrington	2422'		
Krider	2456'		
Winfield	2533'		
Ft. Riley	2589'		
Council Grove	2732'		
Heebner	3964'		
Toronto	3972'		
Lansing	4084'		
Checkerboard	4410'		
Marmaton	4718'		
Cherokee	4894'		
Atoka	5094'		
Morrow	5268'	St. Genevieve	5536'
Chester	5395'	St. Louis	5660'

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#/Ft.	1528'	35/65 poz Class C	535 150	
Production	7-7/8"	4-1/2"	10.5#/Ft.	5826'	50/50 poz	270	

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose	Depth		Type of Cement	#Sacks Used	Type and Percent Additives
	Top	Bottom			
<input type="checkbox"/> Perforate					
<input type="checkbox"/> Protect casing					
<input type="checkbox"/> Plug Back TD					
<input type="checkbox"/> Plug Off Zone					

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	Depth
2	St. Louis	5663'-5698'	Acidize St. Louis w/3000 gals 15% MSR-100 + NE Agent + 72 Ball Sealers	5663'-98'
2	Chester	5451'-5458'	Acidize Chester w/1000 gals 7 1/2% MSR-100 + NE Agent + 32 Ball Sealers	5451'-58'
			Frac Chester w/19142 gals YF130 + 25700# Ottawa Sand	
(SEE ATTACHED SHEET FOR ADDITIONAL PERFORATION RECORD)				

TUBING RECORD		Size	Set At	Packer At	Liner Run			
		2-3/8"	5358'		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Date of First, Resumed Production, SWD or Inj.		Producing Method						
WOPL		<input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)						
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	Bbls.	Gas-Oil Ratio	Gravity

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

METHOD OF COMPLETION Production Interval

PHONE
316 / 624-7340

DEAN'S TESTERS INC.

ORIGINAL

P. O. BOX 1182
LIBERAL, Ks. 67801

SEC. 17

Cabot Oil & Gas Corp.
OPERATOR

Johnson #4-17
WELL NAME & NO.

TEST #

4008'-4134'
TEST INTERVAL

TWP. 32S

R0E. 33W

COUNTY Seward

STATE Kansas

TICKET NO. 262

Formation Toronto Type Test Conventional Date December 15, 1992

Anchor Length and Size 126'; 89'X 6"OD-D.C., 37'X 4½"OD-Perf. Total Depth 4134'

Packer Depths 4003' & 4008' Below Straddle _____ Choke Size Bottom 5/8" Surface 1/4"

Equipment Run 2 Packers, Jars, Sample Chamber, Safty joint, Circ. sub.

Lengths: Tool 159' D.P. 3400' ID 3.8" Wt. P. _____ ID _____ D.C. 602' ID 2.25"

Mud Type Chemical Vls. 46 Wt. 8.9 Wtr. Loss 12.4 Cl. 2400 ppm

Recorders:

Depth <u>4028'</u>	Make <u>Kuster</u>	Cap. <u>6400</u>	Ser. No. <u>13373</u>	Inside
Depth <u>4035'</u>	Make <u>Kuster</u>	Cap. <u>6450</u>	Ser. No. <u>6064</u>	Outside
Depth _____	Make _____	Cap. _____	Ser. No. _____	Below Straddle

Pressures:

Tool on Bottom @ <u>12:20 P.M.</u>	Initial Hydrostatic _____	1929	_____	psi
Initial Flow _____	IFP _____	122	_____	psi to _____
Initial Shut-in _____	ISIP _____	1131	_____	psi
Final Flow _____	FFP _____	312	_____	psi to _____
Final Shut-in _____	FSIP _____	1131	_____	psi
Tool off Bottom @ <u>5:05 P.M.</u>	Final Hydrostatic _____	1913	_____	psi Temp. <u>105</u>

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Blow: Weak increasing to good on both flow periods.

Recovery: 790' Total Fluid. (5.54 bbl.)
 140' Mud. (1.93 bbl.)
 180' Muddy Water. (1.30 bbl.)
 470' Salt Water. (2.31 bbl.)

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Gas Flow:

Sampler Data:

Pressure 345 _____ PSI

Gas none _____ cu. ft.

Total Fluid 2000 _____ cc

Oil -- _____ cc

Water 1700 _____ cc

Mud 300 _____ cc

Oil Gravity _____ @ _____ °F.

Gas/Oil Ratio _____

Remarks:

Fluid Analysis:

	Cl. PPM	S.G.	Ph	Rw.
Pit: 2500	2500	1.002	9	1.50 @ 65 F.
Top: 5500	5500	1.005	9	.80 @ 65 F.
Middle: 42,000	42,000	1.045	7	.12 @ 65 F.
Bottom: 70,000	70,000	1.075	7	.08 @ 65 F.
Sampler: 72,000	72,000	1.080	7	.08 @ 65 F.

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CONSERVATION DIVISION
Wichita, Kansas

Tester Dean Blagrave

Witnessed by: Carl Cowan

Pressure Break Down

ORIGINAL

Test ticket no. 3262 Recorder no. 13373 Capacity 6400 Rec. Depth. 4028'

Initial Flow pressure 122 to 270 Time Given 45 Computed 45
 Initial Closed in pressure 1131 60 60
 Final Flow pressure 312 to 396 60 60
 Final Closed-in pressure 1131 120 122
 Initial Hydrostatic pressure 1929 Final Hydrostatic press. 1913 Temp 105

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Initial Flow Press.

Minutes	Press
0	122
5	132
10	132
15	145
20	158
25	177
30	209
35	235
40	251
45	270
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
100	
105	
110	
115	
120	

Initial Closed in Press.

Minutes	Press
0	270
3	
6	996
9	
12	1061
15	
18	1086
21	
24	1102
27	
30	1112
33	
36	1118
39	
42	1122
45	
48	1125
51	
54	1128
57	
60	1131
63	
66	
69	
72	
75	
78	
81	
84	
87	
90	
93	
96	
99	
102	
105	
108	
111	
114	
117	
120	

Final Flow Press

Minutes	Press
0	--
5	312
10	316
15	325
20	335
25	341
30	348
35	354
40	364
45	374
50	380
55	387
60	396
65	
70	
75	
80	
85	
90	
95	
100	
105	
110	
115	
120	
125	
130	
135	
140	
145	
150	
155	
160	
165	
170	
175	
180	

Final Closed in Press.

Minutes	Press
0	396
3	
6	974
9	
12	1041
15	
18	1070
21	
24	1086
27	
30	1096
33	
36	1102
39	
42	1109
45	
48	1112
51	
54	1115
57	
60	1118
63	
66	1122
69	
72	1122
75	
78	1125
81	
84	1125
87	
90	1125
93	
96	1128
99	
102	1128
105	
108	1128
111	
114	
117	
120	1131
122	1131

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 117
 120 1131
 122 1131

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DRILLERS LOG

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CABOT OIL & GAS CORPORATION
JOHNSON #4-17
SECTION 17-T32S-R33W
SEWARD COUNTY, KANSAS

APR 2 8 1994

FROM CONFIDENTIAL

COMMENCED: 12-11-92
COMPLETED: 12-20-92

SURFACE CASING: 1531' OF 8 5/8"
CMTD W/525 SX 35/65 POZ, 2% C.C.,
1/4#/SX FLO-CELE; TAILED IN W/
150 SX "C", 2% C.C.

FORMATION	DEPTH
CONDUCTOR CASING	0- 82
SURFACE HOLE	82-1528
SHALE	1528-2300
LIME & SHALE	2300-2740
SHALE	2740-3410
SHALE & LIME	3410-5850 RTD

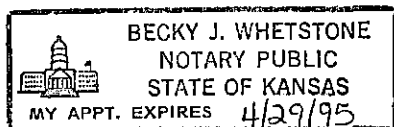
I DO HEREBY CERTIFY THAT THE FOREGOING STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

CHEYENNE DRILLING, INC.

A. J. Jacques
A. J. JACQUES

STATE OF KANSAS :ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 22ND DAY OF DECEMBER, 1992



Becky J. Whetstone
BECKY J. WHETSTONE, NOTARY PUBLIC

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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	Morrow 5382'-5392'	Acidize Morrow w/1000 gals 7-1/2% MSR-100 + 44 Ball Sealers	5382-92'
	CIBP Set @ 5430'	Frac Morrow w/33450 gals 70Q-55Q YF-130HTD + 51000# 16/30 Ottawa Sand	

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CONSERVATION DIVISION
Wichita, Kansas

CEMENTING SERVICE REPORT



DOWELL SCHLUMBERGER INCORPORATED

CEMENT NUMBER: 03-12-4947 DATE: 12-12-92
 STAGE: D1 DISTRICT: ULYSSES, KS

DS-488 PRINTED IN U.S.A.

WELL NAME AND NO: Johnson #4-17 LOCATION (LEGAL): SA 17-32s-33w
 COUNTY/PARISH: Seward STATE: KS APL. NO.:
 NAME: Cabot Oil Gas ORIGINAL
 AND:
 ADDRESS: RELEASED
 ZIP CODE: APR 28 1994
 SPECIAL INSTRUCTIONS: FROM CONFIDENTIAL

RIG NAME: Haypene #4
 WELL DATA: BIT SIZE: 12 1/4 TOTAL DEPTH: 1530
 WEIGHT: 824 FOOTAGE: 1530
 MUD TYPE: GRADE: JSS
 MUD DENSITY: 4.5
 MUD VISC.: 94.5
 NOTE: Include Footage From Ground Level To Head In Disp. Capacity

IS CASING/TUBING SECURED? YES NO
 LIFT PRESSURE: 629 PSI CASING WEIGHT - SURFACE AREA: (8.14 x R)
 PRESSURE LIMIT: PSI BUMP PLUG TO: 1070 PSI
 ROTATE: RPM RECIPROCATATE: FT No. of Centralizers: 10

TYPE: Office Est 1485
 TYPE: T-pattern 1530
 Head & Plugs: Double Single Swage Knockoff
 SQUEEZE JOB: TYPE DEPTH TAIL PIPE: SIZE DEPTH TUBING VOLUME CASING VOL BELOW TOOL TOTAL ANNUAL VOLUME

TIME: 0001 to 2400 PRESSURE: TBG OR D.P. CASING VOLUME PUMPED: INCREMENT CUM. JOB SCHEDULED FOR TIME: 0130 DATE: 12/12/92 ARRIVE ON LOCATION TIME: 0130 DATE: 12/12/92 LEFT LOCATION TIME: 0800 DATE: 12/12/92

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM.	TIME	DATE	TIME	DATE	TIME	DATE	
0604		40	13		7.5	H2O					
0606		220	200		7.5	cmf. 12.2					
0619		270	100		7.5	cmf. 12.2					
0630		250	35		7.5	cmf. 14.8					
0634		340	28		7.5	cmf. 14.8					
0637		80	94.5		7.5	H2O					
0638		1100	10		7.5	H2O				APR 2	
0641		210	30		7.4	H2O				CONFIDENTIAL	
0643		290	50		7.4	H2O					
0644		300	55		7.4	H2O					
0648		450	80		7.4	H2O					
0649		460	87		7	H2O					
0651		420	92		2	H2O					
0652		1070	95		2	H2O					
0657											

REMARKS: PRE-JOB SAFETY MEETING start H2O ahead start lead cmf. PSI check start tail cmf. PSI check start displacement PSI check APR 2 CONFIDENTIAL cement to surface PSI check lower Rnto PSI check bump top plug bleed psi at float holding end job

SYSTEM CODE	NO. OF BAGS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS			BLUARY MIXED	
			1	2	3	BBL	DENSITY
1.	535	2.10	35poz + 6%gel + 2%occl2 + 4"1024			200	12.2
2.							
3.	150	1.32	class C + 2%occl2				
4.							
5.							
6.							

BREAKDOWN FLUID TYPE: HESITATION SO. RUNNING SO. CIRCULATION LOST YES NO
 BREAKDOWN: PSI FINAL PSI DISPLACEMENT VOL. 94.5 Bbls
 Washed Thru Perfs: YES NO TO FT. MEASURED DISPLACEMENT: WIRELINE
 PERFORMANCES: TO TO CUSTOMER REPRESENTATIVE: Paul ... SUPERVISOR: Tama ...

STATE COMMISSION RECEIVED APR 9 1993

CEMENTING SERVICE REPORT



DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER 4760	DATE 12/19/92
STAGE D5	DISTRICT 0312

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO. Johnson 4-17	LOCATION (LEGAL) SEC 17 - 322 - 33w
FIELD POOL Hyokm	FORMATION
COUNTY/PARISH Seward	STATE KANSAS API. NO.

RIG NAME: Cherokee #4	WELL DATA	BOTTOM	TOP
BIT SIZE 7 1/8	CSG/Liner Size 4 1/2		
TOTAL DEPTH 10.5	WEIGHT 10.5		
<input checked="" type="checkbox"/> ROT <input type="checkbox"/> CABLE FOOTAGE 2826			
MUD TYPE	GRADE		
<input type="checkbox"/> BHST <input type="checkbox"/> BHCT	THREAD 8 1/4		
MUD DENSITY	LESS FOOTAGE SHOE JOINT(S) 40		TOTAL
MUD VISC.	Disp. Capacity 5786	91.9	

NAME **Cabot oil Gas**

AND **RELEASED**

ADDRESS

ZIP CODE **67208**

SPECIAL INSTRUCTIONS

Force Materials + FROM CONFIDENTIAL

5114 cmt 4 1/2 galium 659

SHOE IF real	TYPE Shoe + collar	TYPE
DEPTH		DEPTH
TYPE flapper sub ft	Shoe Tool	TYPE
DEPTH		DEPTH

IS CASING/TUBING SECURED? YES NO

LIFT PRESSURE **2876** PSI CASING WEIGHT SURFACE AREA

PRESSURE LIMIT **1000** PSI BUMP PLUG TO **1450** PSI

ROTATE **15** RPM RECIPROCATE **20-20** No. of Centralizers **15**

Head & Plugs	<input type="checkbox"/> TBG	<input type="checkbox"/> D.P.	SQUEEZE JOB
<input type="checkbox"/> Double	SIZE	TOOL	TYPE
<input checked="" type="checkbox"/> Single	<input type="checkbox"/> WEIGHT	DEPTH	
<input type="checkbox"/> Swage	<input type="checkbox"/> GRADE	TAIL PIPE: SIZE	DEPTH
<input type="checkbox"/> Knockoff	<input type="checkbox"/> THREAD	TUBING VOLUME	Bbls
TOP <input type="checkbox"/> OR <input type="checkbox"/> W	<input type="checkbox"/> NEW <input type="checkbox"/> USED	CASING VOL. BELOW TOOL	Bbls
BOT <input type="checkbox"/> OR <input type="checkbox"/> W	DEPTH	TOTAL	Bbls
		ANNUAL VOLUME	Bbls

JOB SCHEDULED FOR TIME: **1900** DATE: **12/19** ARRIVE ON LOCATION TIME: **1700** DATE: **12/19** LEFT LOCATION TIME: **0700** DATE: **12/20**

TIME	PRESSURE		VOLUME PUMPED BBL		INJECT RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOG DETAIL
	TBG OR D.P.	CASING	INCREMENT	CUF				
0001 to 2400								
02:08	NH	300	10	-	4.5	160	8.33	RE-JOB SAFETY MEETING Test done
02:41		450	03	-	7.8	160	8.33	Gell 160
02:48		650	14.9	-	7.8	Cmt	14.0	CW100 + 2pc.
02:57		0	0	-	0			Cmt Slurry
02:50		200	03	-	8.3	160	8.43	Shut Down, washline, drop plug
3:00		650	52	-	8.28			DISTANCE
3:15	NH	1450	92.3	-	1.9			20% K1 start pump ft.
3:16		0	0	-	0			Bump plug
3:16		0	0	-	0			release psi
								END JOB

ORIGINAL APR 2 CONFIDENTIAL

REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS		SLURRY MIXED	
			BBLs	DENSITY	BBLs	DENSITY
1.	070	1.35	5760	7% + 2 1/2% D16 + 10% D11 + 2.5% D15		
2.				1.2% D16 + 12.5% D16		
3.						
4.						
5.						
6.						

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APR 9 1993

BREAKDOWN FLUID TYPE	VOLUME	DENSITY	PRESSURE	MAX. 1450 MIN: 0
<input type="checkbox"/> HESITATION SQ.	<input type="checkbox"/> ROMMING SQ.	CIRCULATION LOST	<input type="checkbox"/> YES <input type="checkbox"/> NO	CONSERVATION DIVISION
BREAKDOWN	PSI	FINAL	PSI	DISPLACEMENT VOL. 91.9 Bbls
Washed Thru Perfs <input type="checkbox"/> YES <input type="checkbox"/> NO	TO	FT	MEASURED DISPLACEMENT	<input type="checkbox"/> WIRELINE
PERFORATIONS	TO	TO	CUSTOMER REPRESENTATIVE	DS SUPERVISOR
			Carl Cowan	Greg Black