

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

APPLICATION TO DRILL DEEPEN PLUG BACK
 for an oil well or gas well

NAME OF COMPANY OR OPERATOR Pense Bros. DATE 10-1-97
800 Newberry St. Box 551 Fredricktown MO 63645

Address City State

DESCRIPTION OF WELL AND LEASE

Name of lease <u>Markham</u>	Well number <u>8</u>	Elevation (ground) <u>960</u>
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WELL LOCATION (give footage from section lines)
800 ft. from ~~64~~ (S) sec. line 1100 ft. from (E) (W) sec. line

WELL LOCATION Section 5 Township 43N Range 33W County Cass

Nearest distance from proposed location to property or lease line: _____ feet
 Distance from proposed location to nearest drilling, completed or applied for well on the same lease: _____ feet

Proposed depth <u>300</u>	Drilling contractor, name & address <u>Town Oil Co.</u>	Rotary or Cable Tools <u>Rotary</u>	Approx. date work will start <u>When approved</u>
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Number of acres in lease <u>See map</u>	Number of wells on lease, including this well, completed in or drilling to this reservoir: _____
	Number of abandoned wells on lease: _____

If lease, purchased with one or more wells drilled, from whom purchased: Name Pense Bros No. of Wells: producing _____
800 Newberry St. Fredricktown, MO 63645 injection _____
Address inactive _____
abandoned _____

Status of Bond
 Single Well Amt. _____ Blanket Bond Amt. 20,000 ON FILE ATTACHED

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) use back of form if needed.
N/A

Proposed casing program:				Approved casing -- To be filled in by State Geologist			
amt.	size	wt /ft.	cem.	amt.	size	wt /ft.	cem.
<u>20</u>	<u>6 1/2</u>	<u>14</u>	<u>3</u>				
<u>300</u>	<u>2 7/8</u>	<u>6.5</u>	<u>40</u>				

I, the undersigned, state that I am the a partner of the Town Oil Co. (company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.
 Signature: Resta Town

Permit Number: 20645 Drillers log required Drill stem test info. required if run
 Approval Date: 10/6/97 E-logs required if run Samples required
 Approved By: Janebel Williams Core analysis required if run Samples not required

Note: This Permit not transferable to any other person or to any other location.

Remit two copies to: Missouri Oil and Gas Council
 P.O. Box 250 Rolla, Mo. 65401
 One will be returned for driller's signature

WATER SAMPLES REQUIRED @

Approval of this permit by the Oil and Gas Council does not constitute endorsement of the geologic merits of the proposed well nor endorsement of the qualifications of the permittee.



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI OIL AND GAS COUNCIL
WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

Form OGC-5

NEW WELL WORKOVER DEEPEN PLUG BACK INJECTION SAME RESERVOIR DIFFERENT RESERVOIR OIL GAS DRY

OWNER: **Pense Bros. Drilling Co., Inc.** ADDRESS: **800 Newberry St. Fredericktown, Mo. 63645**

LEASE NAME: **Markham** WELL NUMBER: **8**

LOCATION: **800' FSL 1100' FEL** SEC. TWP. AND RANGE OR BLOCK AND SURVEY: **5-43N-33W**

COUNTY: **Cass** PERMIT NUMBER (OGC-3 OR OGC-3I): **20645**

DATE SPUDDED: **10-6-97** DATE TOTAL DEPTH REACHED: **10-9-97** DATE COMPLETED READY TO PRODUCE OR INJECT: **10-24-97** ELEVATION (DF, RKR, RT, OR Gr.) FEET: **960** ELEVATION OF CASING HD. FLANGE FEET:

TOTAL DEPTH: **502** PLUG BACK TOTAL DEPTH: **350'**

PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION: **288-296** ROTARY TOOLS USED (INTERVAL) TO: **502** CABLE TOOLS USED (INTERVAL):

WAS THIS WELL DIRECTIONALLY DRILLED? **No** WAS DIRECTIONAL SURVEY MADE? WAS COPY OF DIRECTIONAL SURVEY FILED? DATE FILED:

TYPE OF ELECTRICAL OR OTHER LOGS RUN (LIST LOGS FILED WITH THE STATE GEOLOGIST): **Gamma Ray Neutron enclosed** DATE FILED:

CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL - CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.)

PURPOSE	SIZE HOLE DRILLED	SIZE CASING SET	WEIGHT (LB. FT)	DEPTH SET	SACKS CEMENT	AMOUNT PULLED
Surface	9 3/4	6 1/4	14	50'	7	0
Completion	5/58	2 7/8	6.5	343'	47	0

TUBING RECORD

LINER RECORD

SIZE	DEPTH SET	PACKER SET AT	SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
NO	IN.	FEET	INCH	FEET	FEET		FEET

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

NUMBER PER FEET	SIZE AND TYPE	DEPTH INTERVAL	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL
2	9"/shot	288-296	25 bbls gelled water 5 sx sand	288-296

INITIAL PRODUCTION

DATE OF FIRST PRODUCTION OR INJECTION: **Unk** PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING — IF PUMPING, SHOW SIZE AND TYPE OF PUMP): **Pumping**

DATE OF TEST	HOURS TESTED	CHOKE SIZE *	OIL PRODUCED DURING TEST	GAS PRODUCED DURING TEST	WATER PRODUCED DURING TEST	OIL GRAVITY
			bbls.	MCF	bbls.	API (CORR.)
TUBING PRESSURE	CASING PRESSURE	CALC'D RATE OF PRODUCTION PER 24 HOURS	OIL	GAS	WATER	GAS OIL RATIO
			bbls.	MCF	bbls.	

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD): **RECEIVED**

DEC 14 1998

METHOD OF DISPOSAL OF MUD PIT CONTENTS: **Hauled off and covered with dirt**

MO Oil & Gas Council

CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE **Partner** OF THE **Town Oil Co.** COMPANY, AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT, AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DATE: **12-4-98** SIGNATURE: **Lester Tomer by djv**

Well #8
 Farm: Markham
 Cass County, KS.
 Lease Owner: Pense Bros Drilling Co., Inc.

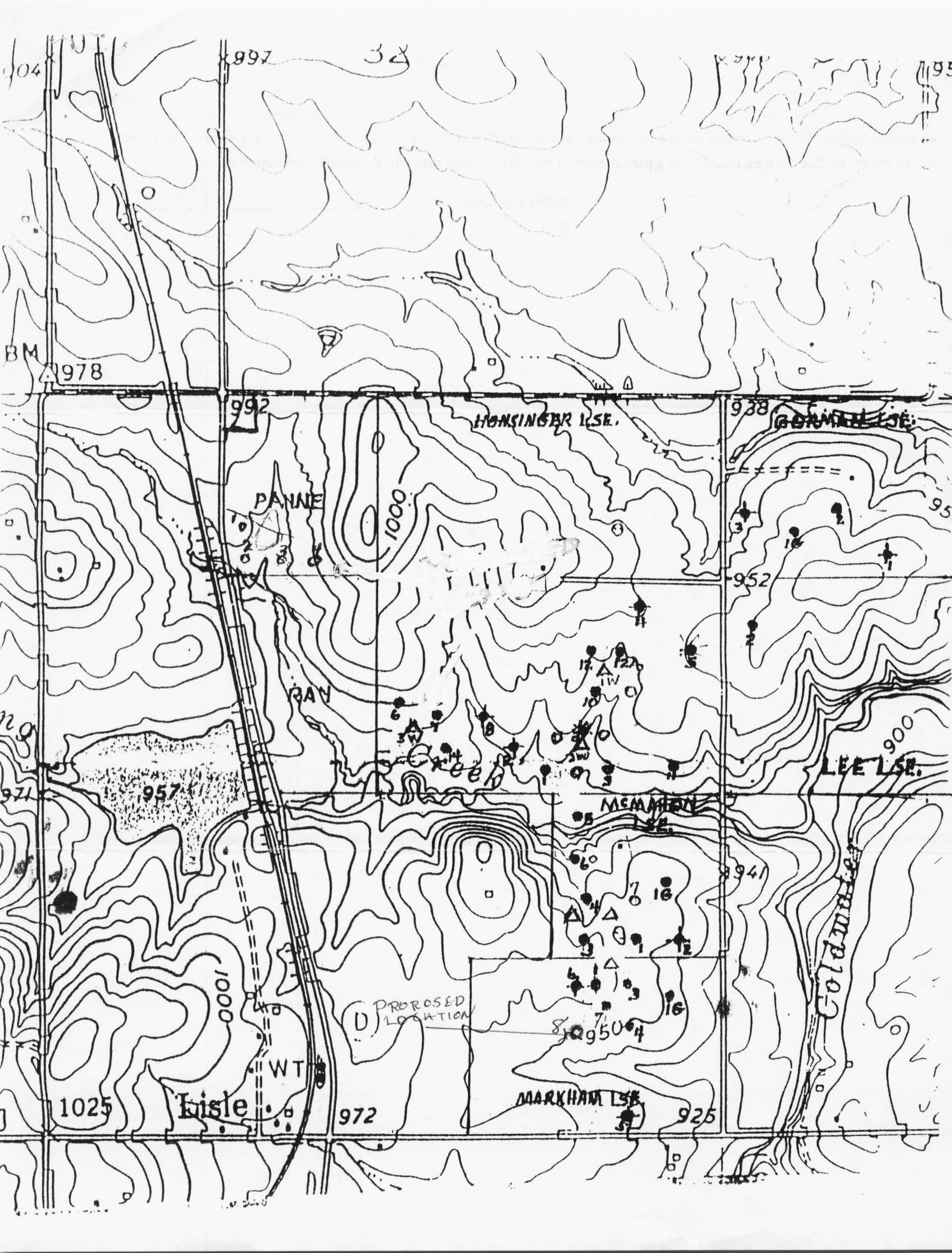
WELL LOG

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total Depth</u>
19	Soil & clay	19
6	Shale	25
5	Lime	30
9	Shale	39
45	Lime	84
7	Shale & slate	91
19	Lime	110
6	Shale & slate	116
2	Lime	118
2	Shale & slate	120
6	Lime	126
5	Shale shells	131
24	Shale	155
9	Sand	164
72	Shale	238
6	Sand	241
4	Sandy shale	248
21	Shale	269
2	Shale dk.	271
1	Sand	272
2	Sand	274
2	Sandy shale	276
1	Sandy lime	277
3	Sand	280
1	Sand	281
1	Sand	282
2	Sandy shale	284
3	Sand	287
4	Sand	291
3	Sand	294
1	Sand	295
3	Sandy shale	298
2	Sand	300
29	Shale	329
6	Lime	335
5	Shale	340
6	Lime	346
8	Shale	354
14	Lime shells	368
1	Sand	369
11	Shale dk.	380
5	Lime	385
2	Slate	387
5	Sand	392
21	Lime	413

Hertha

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 MO Oil & Gas Council

10	Shale shells	423	
3	Lime	426	
6	Shale & slate	432	
3	Shale	435	
5	Lime	440	
7	Shale	447	
1	Sand	448	
2	Slate	450	
3	Shale	453	
17	Sand	470	
5	Sandy shale	475	
16	Shale	491	
6	Sand	497	
3	Sandy shale	500	
2	Shale	502	TD



34

997

904

998

995

BM

978

992

HONSINGER LSE.

938

GERRARD LSE.

PANNE

1000

952

RAY

LEE LSE.

900

957

MEMPHIS

941

PROPOSED
LOCATION
D

950

1025

Kisle

WT

972

MARKHAM LSE

925

Goldmine

MECHANICAL INTEGRITY TEST REPORT

Test Date: Spring 2003 ~~02x~~ 4-10

Operator: Town Oil Co.
Contact Person: Lester Town
Address: 16205 W. 287th St. Paola Ks. 66071
Phone: 913-294-2125 or 913-557-5482

Lease Markham Well # 8
County Cass Permit # 20643

TEST INFORMATION:

Type MIT: Pressure Radioactive Tracer Survey Temperature Survey

	Run #1	Run #2	Run #3
Start Time:	<u>12:15</u>	<u> </u>	<u> </u>
End Time:	<u>12:45</u>	<u> </u>	<u> </u>
Length of Test: (Start Time minus End Time)	<u>30 MIN</u>	<u> </u>	<u> </u>

Initial Pressure (PSI):	<u>200 #</u>	<u> </u>	<u> </u>
Ending Pressure (PSI):	<u>200 #</u>	<u> </u>	<u> </u>
Pressure Change: (Initial Pressure minus Ending Pressure)	<u>0</u>	<u> </u>	<u> </u>

Fluid used for test (water, nitrogen, CO2, ect.): Air

Comments about test: Perfs: 288-296 (not perforated)
T.D. 334.0

Run 1" Pipe w/ Packer 275' to Perf
test with air

The bottom of the tested zone is shut in with Packer
at a depth of 275' ft. In signing the form below, it is certified
that the above indicated well was tested for mechanical integrity on the
date shown at the top of this page.

Signed: Steele P. Houlukoo EOR
Operator Contact Person or Title
Approved Agent

DO NOT WRITE BELOW THIS LINE

Results were: Satisfactory X Not Satisfactory
State Agent: Witnessed: Yes No ✓

REMARKS:
Computer Update FILE WITH PERMIT!

CONSOLIDATED INDUSTRIAL SERVICES, INC.
 211 W. 14TH STREET, CHANUTE, KS 66720
 316-431-9210 or 800-467-8676

TICKET NUMBER **4611**
 LOCATION Ottawa
 FOREMAN Alan Mader

TREATMENT REPORT

DATE	CUSTOMER ACCT #	WELL NAME	QTR/QTR	SECTION	TWP	RGE	COUNTY	FORMATION
10-24-97	7823	Markham #8		5	43	5B	Cass Mo	
CHARGE TO <u>Town Oil</u>				OWNER				
MAILING ADDRESS <u>16205 W 287 St.</u>				OPERATOR				
CITY <u>Paola</u>				CONTRACTOR <u>Town</u>				
STATE <u>KS</u>		ZIP CODE <u>66071</u>		DISTANCE TO LOCATION <u>45m</u>				
TIME ARRIVED ON LOCATION <u>1:00</u>				TIME LEFT LOCATION <u>2:30</u>				

WELL DATA	
HOLE SIZE	<u>5 5/8</u>
TOTAL DEPTH	<u>340</u>
CASING SIZE	<u>2 7/8</u>
CASING DEPTH	<u>335</u>
CASING WEIGHT	
CASING CONDITION	
TUBING SIZE	
TUBING DEPTH	
TUBING WEIGHT	
TUBING CONDITION	
PACKER DEPTH	
PERFORATIONS	
SHOTS/FT	
OPEN HOLE	
TREATMENT VIA	

TYPE OF TREATMENT	
<input type="checkbox"/> SURFACE PIPE	<input type="checkbox"/> ACID BREAKDOWN
<input checked="" type="checkbox"/> PRODUCTION CASING	<input type="checkbox"/> ACID STIMULATION
<input type="checkbox"/> SQUEEZE CEMENT	<input type="checkbox"/> ACID SPOTTING
<input type="checkbox"/> PLUG & ABANDON	<input type="checkbox"/> FRAC
<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> FRAC + NITROGEN
<input type="checkbox"/> MISC PUMP	<input type="checkbox"/> FOAM FRAC
<input type="checkbox"/> OTHER	<input type="checkbox"/> NITROGEN

	PRESSURE LIMITATIONS	
	THEORITICAL	INSTRUCTED
SURFACE PIPE		
ANNULUS LONG STRING		
TUBING		

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INSTRUCTIONS PRIOR TO JOB

DESCRIPTION OF JOB EVENTS Establish circulation with pit water. Mixed & pumped 15x gel with pit water. Circulated gel to top. Mixed & pumped 475x 50/50oz 2% gel. Circulated cement to surface. Pumped 22 rubber plug to pin at 335'. Well held 600# pressure. Closed valve

PRESSURE SUMMARY	
BREAKDOWN or CIRCULATING	psi
FINAL DISPLACEMENT	psi
ANNULUS	psi
MAXIMUM	psi
MINIMUM	psi
AVERAGE	psi
ISIP	psi
5 MIN SIP	psi
15 MIN SIP	psi

TREATMENT RATE	
BREAKDOWN BPM	
INITIAL BPM	
FINAL BPM	
MINIMUM BPM	
MAXIMUM BPM	
AVERAGE BPM	
HYD HHP = RATE x PRESSURE x 40.8	

AUTHORIZATION TO PROCEED _____ TITLE _____ DATE _____

Alan Mader