



Lease JOHNS

Well No. 25-1

Location 510' FNL & 1980' FEL SEC. 25-315-41W County MORTON State KANSAS

K. B. Elev. 3363'
 C. I. Elev. 3350'
 Distance "H" 13'

Date Completed 12-24-85
 Formation (s) UPPER MORROW 'C'
MORROW KEYES

	MOR. 'C'	KEYES	
Initial Production Oil	<u>20</u>	<u>1</u>	B/D
Pump () Flow (X) Water	<u>-</u>	<u>-</u>	B/D
Other	<u>Gas 920</u>	<u>10182</u>	MCF/D

CAOF

Initial Treatments PERF KEYES FROM 5404-14' w/ HPF & SWAB TEST, KICKED OFF FLOWING 1350 MCFD w/ 360# HP B/D w/ 1200 gal 7 1/2% HCL w/ ADDITIVES; FLOW TESTING 20 MCFD w/ 300# FTP; FOAM FRAC w/ 18000 gal 32 GELLED ACID FORMED TO 702 w/ N₂ + 15,000# SAND IN 2 STAGE FLOW TESTING 5000 MCFD w/ 775# FTP; SET OTIS 5 1/2" PKR w/ PLUG @ 5385'; PERF MORROW 'C' FROM 5023-36' w/ 2 HPF; SWAB WELL IN AND KICKED OFF FLOWING 780PH & 722 MCFD w/ 320# FTP. KILL WELL AND RUN IN DUAL STRINGS OF 2 1/2" TBG

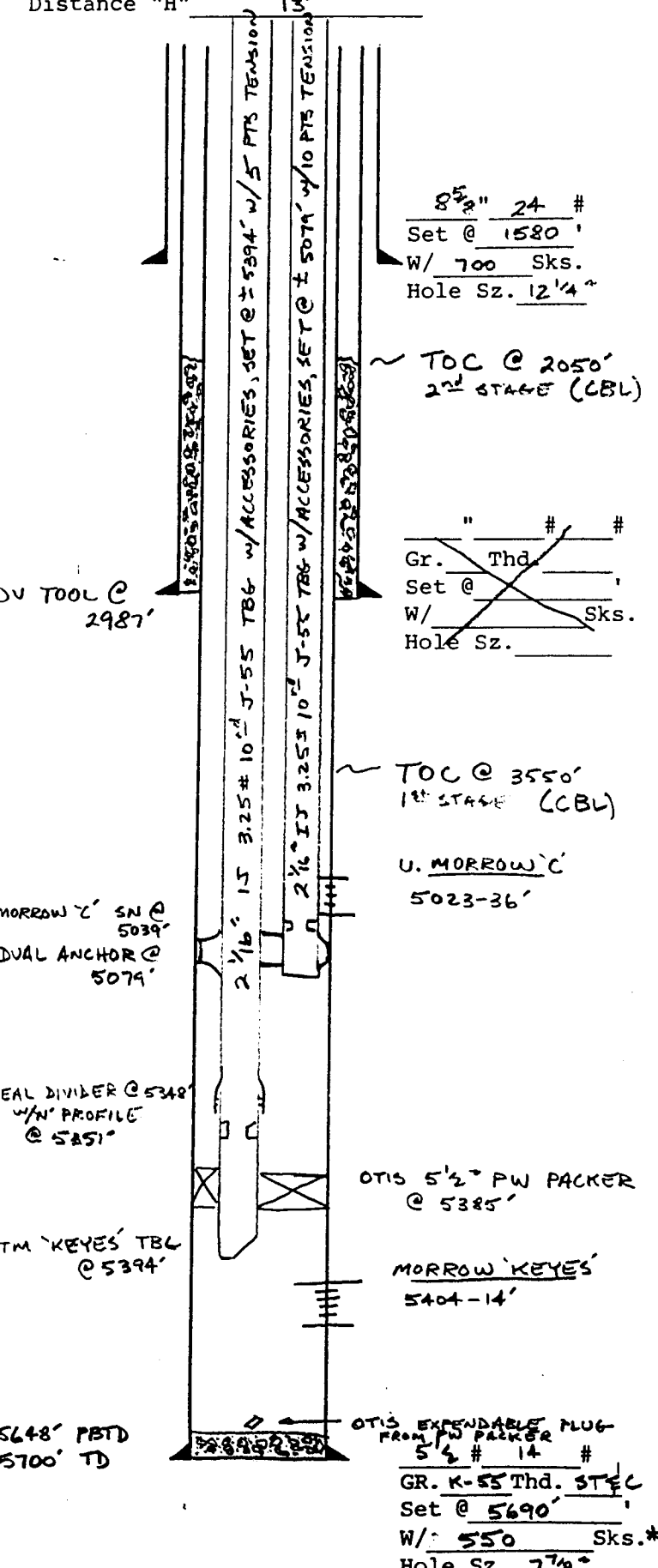
Workovers _____

Present Production Oil	_____	B/D
Pump () Flow () Water	_____	B/D
Other	<u>Gas</u>	MCF/D

Present Producing Equipment _____

Proposed Work _____

Prepared by 6 Date 4-3-86



Total Depth 5700'

PETROLEUM WELL LOGGING, Inc.
OKLAHOMA CITY, OKLAHOMA



DEPTH LOGGED FROM 2000 TO
DATE LOGGED FROM 10-31-85 TO

GL 3350
ELEVATION KB 3363
NR-NO RETURNS
CO-CIRCULATED OUT
DCB-DIAMOND CORE BIT
OST-DRILL STEM TEST

WELL NO. 1 JOHNS
FIELD
COUNTY MORTON STATE KANSAS
LOCATION SEC 25 - 31 S - 41 W
SUPERVISING ENGINEER MUNSON B DAVIS UNIT NO.

DRILLING RATE
X MIN/FT FT/HR

DEPTH LITHOLOGY
LEACHED UNITS
% OIL FLUOR

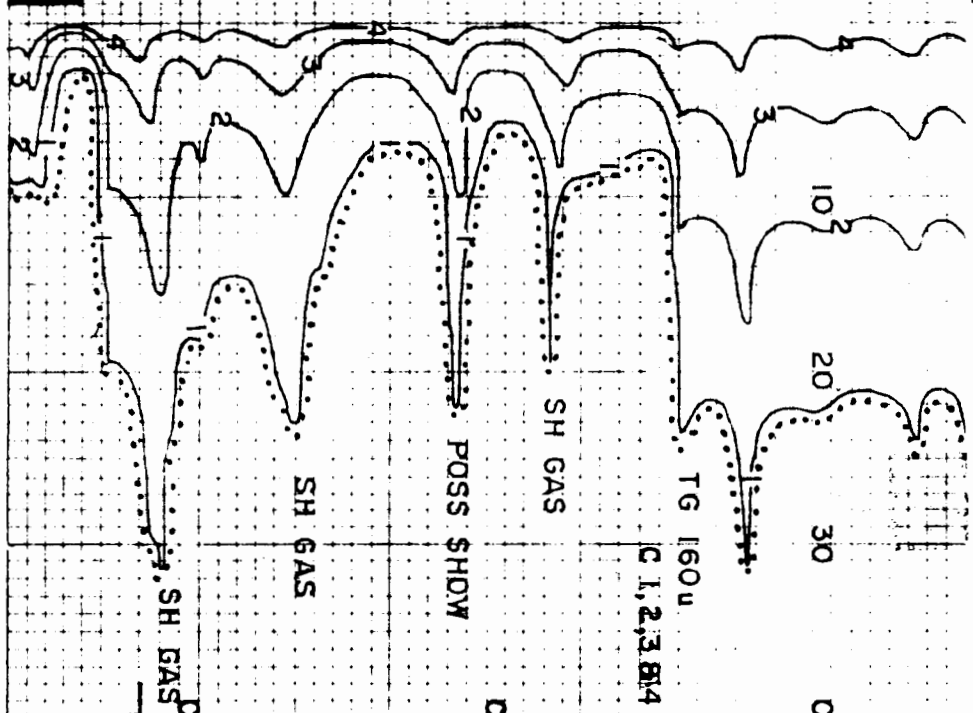
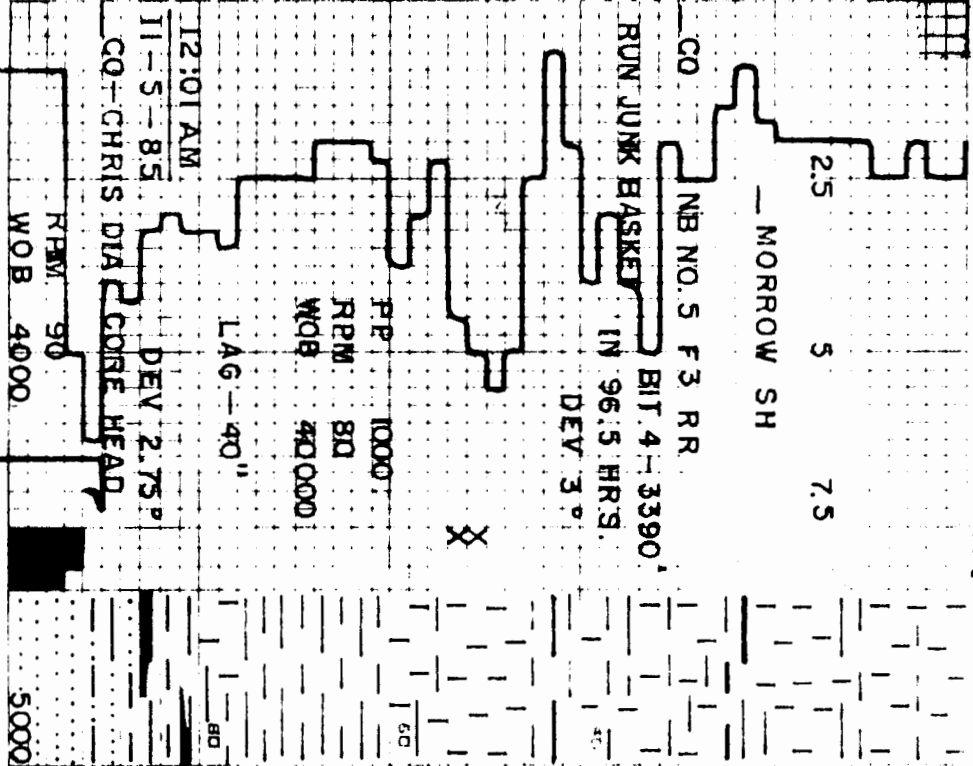
GAS CHROMATOGRAPH ANALYSIS
METHANE - 1 BUTANES - 4
ETHANE - 2 PENTANES - 5
PROPANE - 3 HELIUM - 6
RESULTS IN MOLE PER CENT GAS/AIR

GAS FROM MUD
TOTAL GAS FROM HOT WIRE DETECTOR

LEGEND
SAND ANHYDRITE
LIMESTONE
DOLOMITE
SHALE

REMARKS

GAS FROM CUTTINGS



ARGIL, CARB INCLS IP	W 9
SH A AB - MORE BLK	V 53
	PV 18
	Y/P 17
	GEL 5/15
	F 8
	CK 2
	PH 8.8
	CL 1000
	CA 40
	SOL 5%
	LCM 4 LBS

CLS-LT TN-BN ERTHY B
MICRO - FX DNS
POSS FRAC POR

PSH - A AB-PYR ABUND
TR BLK VIT COAL
SS-FRSTD-LT GY VF-FG
CALC B ARGIL, SL
GLAUC, TT
CORE NO. 1 - (4990-5050)

PETROLEUM WELL LOGGING, Inc.
OKLAHOMA CITY, OKLAHOMA



DEPTH LOGGED FROM 2000 TO
DATE LOGGED FROM 10-31-85 TO

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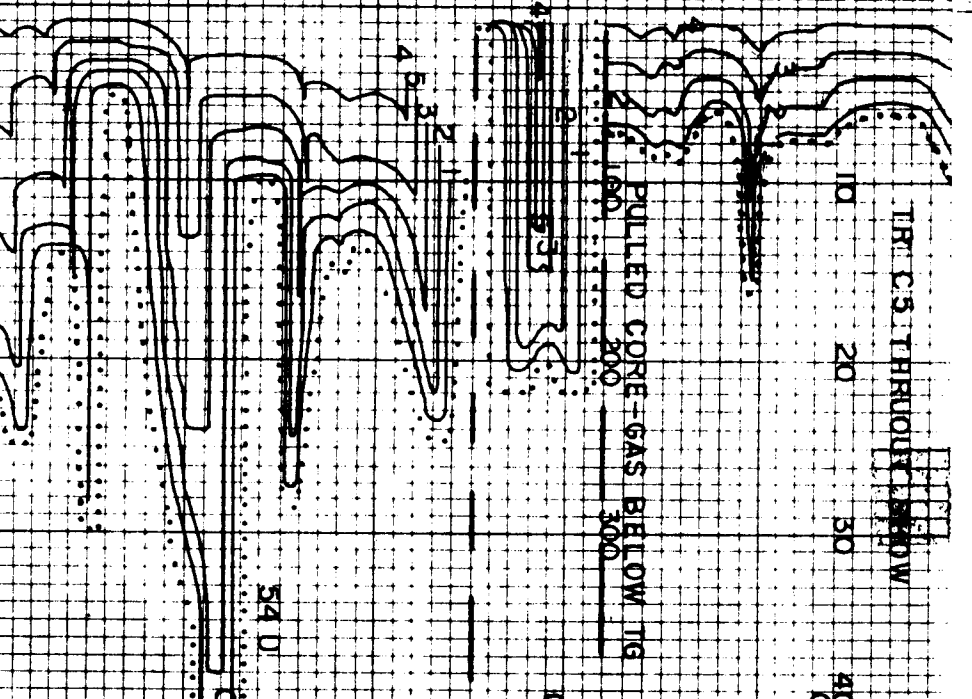
DRILLING RATE
 MIN/FT FT/MR



POROSITY
LITHOLOGY
LEACHED UNITS
% OIL FLUOR

GAS CHROMATOGRAPH ANALYSIS
METHANE - 1 BUTANES - 4
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RESULTS IN MOLE PER CENT GAS/VOL

GAS FROM MUD
TOTAL GAS FROM HOT WIRE DETECTOR



WELL NO. 1 JOHNS
FIELD
COUNTY MORTON STATE KANSAS
LOCATION SEC 25 - 31 S - 41 W
SUPERVISING ENGINEER MUNSON & DAVIS UNIT NO.

LEGEND
SAND CONGLOMERATE
SANDY SHALE
GRANITE
GRANITE WASH
SAND
LIMESTONE
DOLMITE
SANDY SHALE
CHERT
ANHYDRITE
COAL
SHALE

REMARKS

GAS FROM CUTTINGS

CUT 60 REC 60
2' SH - LT GY SLTY B
SDY FSS
1' SS - FG SILIC, CON
FAIR POR
39' SS - CLR-FRSTD -
LT TN CSE G
ANG-SUB ANG
POR INTRG, BLDG
GAS
10'SS-PEBBLE CONG
FRBL ANG-SUB
RDD, FRBL, GAS
BLEEDING
8'SH - GY-GRN FSS,
SFT, OIL SAT
FLUOR - BRT YL W/A/
BRT YL - YL BLUE
STRMG CUT, Hvy STN
SH - MD, DK GRY - SDY IP
F, MD TX
SS - WH, CLR, LT, MD GRY
F, MD GRY - CALC

PANTLCHS LABORATORIES

P. O. BOX 2439 TEL. 806 669-6821 PAMPA, TEXAS 79066-2439
 P. O. BOX 3246 TEL. 806 797-4325 LUBBOCK, TEXAS 79452-3246

SAMPLE DATA

CUSTOMER..... J M HUBER CORPORATION
 STATION No.... --
 OPERATOR..... J M HUBER CORPORATION
 LEASE..... JOHNS 25-1 UMC
 PLANT..... SPEARMAN
 SAMPLE OF..... --
 PRESSURE..... 84#
 TEMPERATURE... --
 ATM. TEMP..... --
 SAMPLE DATE... 10-9-90
 SAMPLED BY.... HUBER
 ANALYSIS DATE. 10-18-90
 SAMPLE CYL.No. PL-1333

ANALYSIS RESULTS

COMPONENT	MOL %	GPM,*
NITROGEN N2	3.41	
CARBON D. CO2	0.35	
METHANE C1	59.96	
ETHANE C2	14.99	4.021
PROPANE C3	14.47	4.043
I-BUTANE IC4	1.88	0.633
N-BUTANE NC4	3.53	1.149
I-PENTANE IC5	0.58	0.223
N-PENTANE NC5	0.62	0.237
HEXANES+ C6+	0.21	0.095

GASOLINE CONTENT (GPM), *

PENTANES & HEAVIER....	0.555
BUTANES & HEAVIER.....	2.337
PROPANE & HEAVIER.....	6.380
ETHANE & HEAVIER.....	10.401
26 # GASOLINE.....	0.778

DISTRIBUTION:

=====
 J M HUBER CORPORATION
 3-#7120 I-40 WEST, AMARILLO, TX 79106
 MR PAUL WALKER
 1-P O Box 888, SPEARMAN, TX 79081
 MR JERRY TROUT
 1-P O Box 2381, BORGER, TX 79007
 MR DOUG REED

HEATING VALUE,**

(GROSS BTU/CF)	
WATER VAP. SAT.....	1461
DRY GAS BASIS.....	1487

SPECIFIC GRAVITY

CALC., WATER SAT.....	0.899
CALC., DRY BASIS.....	0.904

REMARKS:

*, 14.65 PSIA & 60 F
 **, 14.65 PSIA & 60 F

PANTECHS LABORATORIES

P. O. BOX 2439 TEL. 806 669-6821 PAMPA, TEXAS 79066-2439
 P. O. BOX 3246 TEL. 806 797-4325 LUBBOCK, TEXAS 79452-3246

SAMPLE DATA

 CUSTOMER..... J. M. HUBER CORPORATION
 STATION No.... --
 OPERATOR..... J. M. HUBER CORPORATION
 LEASE..... JOHNS 25-1
 PLANT..... --
 SAMPLE OF..... --
 PRESSURE..... 47#
 TEMPERATURE... --
 ATM. TEMP..... --
 SAMPLE DATE... 7-13-89
 TESTER..... --
 SAMPLED BY.... HUBER
 ANALYSIS DATE. 7-17-89

SAMPLE CYL.No. PL-19

DISTRIBUTION:

 J. M. HUBER CORPORATION
 3-7120 I-40 WEST, AMARILLO, TX 79106
 MR. PAUL WALKER
 1-P. O. Box 888, SPEARMAN, TX 79108
 MR. JERRY TROUT
 1-P. O. Box 2381, BORGER, TX 79007
 MR. DOUG REED

REMARKS:

UPPER MORROW C

ANALYSIS RESULTS

COMPONENT	MOL %	GPM, *
=====	=====	=====
NITROGEN N2	4.29	
CARBON D. CO2	0.12	
METHANE C1	64.69	
ETHANE C2	13.03	3.495
PROPANE C3	12.00	3.353
I-BUTANE IC4	1.53	0.515
N-BUTANE NC4	2.92	0.950
I-PENTANE IC5	0.54	0.207
N-PENTANE NC5	0.62	0.237
HEXANES+ C6+	0.26	0.117

GASOLINE CONTENT (GPM), *

=====	=====
PENTANES & HEAVIER....	0.561
BUTANES & HEAVIER.....	2.026
PROPANE & HEAVIER.....	5.379
ETHANE & HEAVIER.....	8.874
26 # GASOLINE.....	0.795

HEATING VALUE, ** (GROSS BTU/CF)

=====	=====
WATER VAP. SAT.....	1381
DRY GAS BASIS.....	1405

SPECIFIC GRAVITY

=====	=====
CALC., WATER SAT.....	0.853
CALC., DRY BASIS.....	0.857

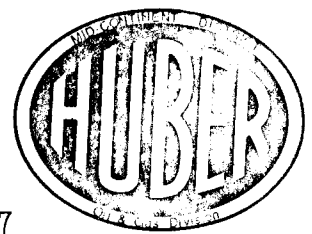
*, 14.65 PSIA & 60 F
 **, 14.65 PSIA & 60 F

WF

HIGH PLAINS

WIRELINE SERVICES, INC.

P.O. Box 981
Perryton, Texas 79070
Phone 806-435-7195



SUBSURFACE PRESSURE SURVEY

Company J.M. Huber Corporation Test Date August 14, 1987
 Lease JOHNS 25-1 Well No. _____ Field Kinsler
 Section 25 Block T31S Survey R40W County Morton State Kansas
 Producing Formation Upper Morrow Measurements Are From KB @ 13'

Elevation _____
 Shut-In Time 96 Hrs.
 Shut-In Tubing Pressure 360#
 Shut-In Casing Pressure ---
 Tubing Size 2 1/16" Set at 5394'
 Packer Set at 5351'
 Perforations 5023' - 5036'
 Top of Oil In Last 100' Approx.
 Top of Water None Approx.
 Temperature at 5030 ft 128 F.
 Date of Last Test April 2, 1987
 Shut-In Time, Last Test 25 Hrs.
 Pressure at Datum, Last Test 522.5

Depth	Time	Pressure	Δ P	Δ D	Gradient
0'	10:13 A	360.2	---	---	---
2000'	10:18	380.3	20.1	2000	.010
4000'	10:23	401.5	21.2	2000	.011
4830'	10:26	409.8	8.3	830	.010
4930'	10:28	413.3	3.5	100	.035
5030'	10:30 A	446.2	32.9	100	.329

INSTRUMENT DATA

Element RPG-3
 No. 47456 Range 0-1500 psi
 Clock Amerada
 No. A22096 Range 3 Hrs.
 Calibration Date June 15, 1987

Remarks:
 Check T.D. at Not Requested

Operator Danny Fowler

HIGH PLAINS

WIRELINE SERVICES, INC.

P.O. BOX 981 • PERRYTON, TX 79070 • 806-435-7195



STATIC GRADIENT SURVEY

Company J.M. HUBER CORPORATION Test Date 8-24-89
Lease & Well No. JOHN 25-1 UPPER Field KINSLER
Section 25 Blk/Twnshp 31 Srvy/Rg 41W
County MORTON State KANSAS
Measurements From 13' AGL Tubing Size 2 16H Set @ 5039
Packer @ 5039 Perforations 5023 to 5036 Formation U. MORROW
Instrument Run Depth 5030 Maximum Temperature 130 F
Test Started @ _____ Begining Tubing Pressure (DWT) 141 PSIG
Begining Casing Pressure (DWT) 144 PSIG
Shut-in Time 52 hrs
Date of Last Test _____
Datum Pressure Last Test _____ PSIG
Top of Liquid @ 4930 Ft. (approx.)

Comments: _____

Instrument #: 57101 Range: 2010 psig Clock Range: 3 hrs

Depth of Bomb (ft)	Time	Pressure PSIG	dPressure PSI	dDepth (ft)	Gradient (PSI/ft)
0	1:37P	142.4	0.00	0	0.000
1500	1:43	148.7	6.29	1500	0.004
3000	1:48	156.3	7.54	1500	0.005
4500	1:52	164.6	8.38	1500	0.006
4830	1:55	166.8	2.20	330	0.007
4930	1:58	168.0	1.15	100	0.012
5030	2:01	186.5	18.54	100	0.185

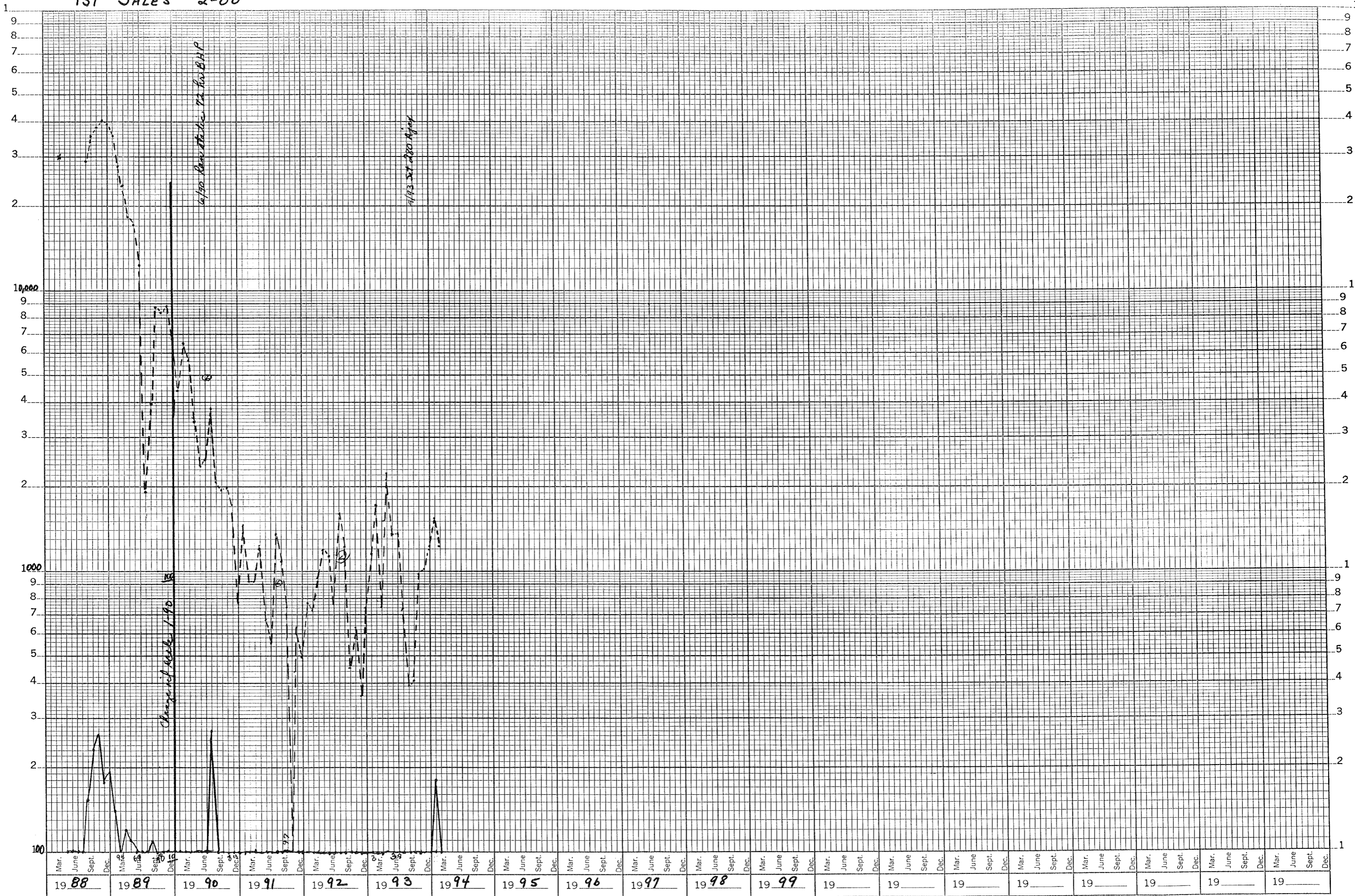
1ST SALES 2-88

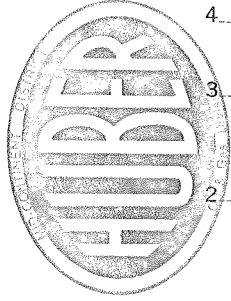
JOHNS 25-1 (KEYES)

47 6840

20 YEARS BY MONTHS X 3 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.

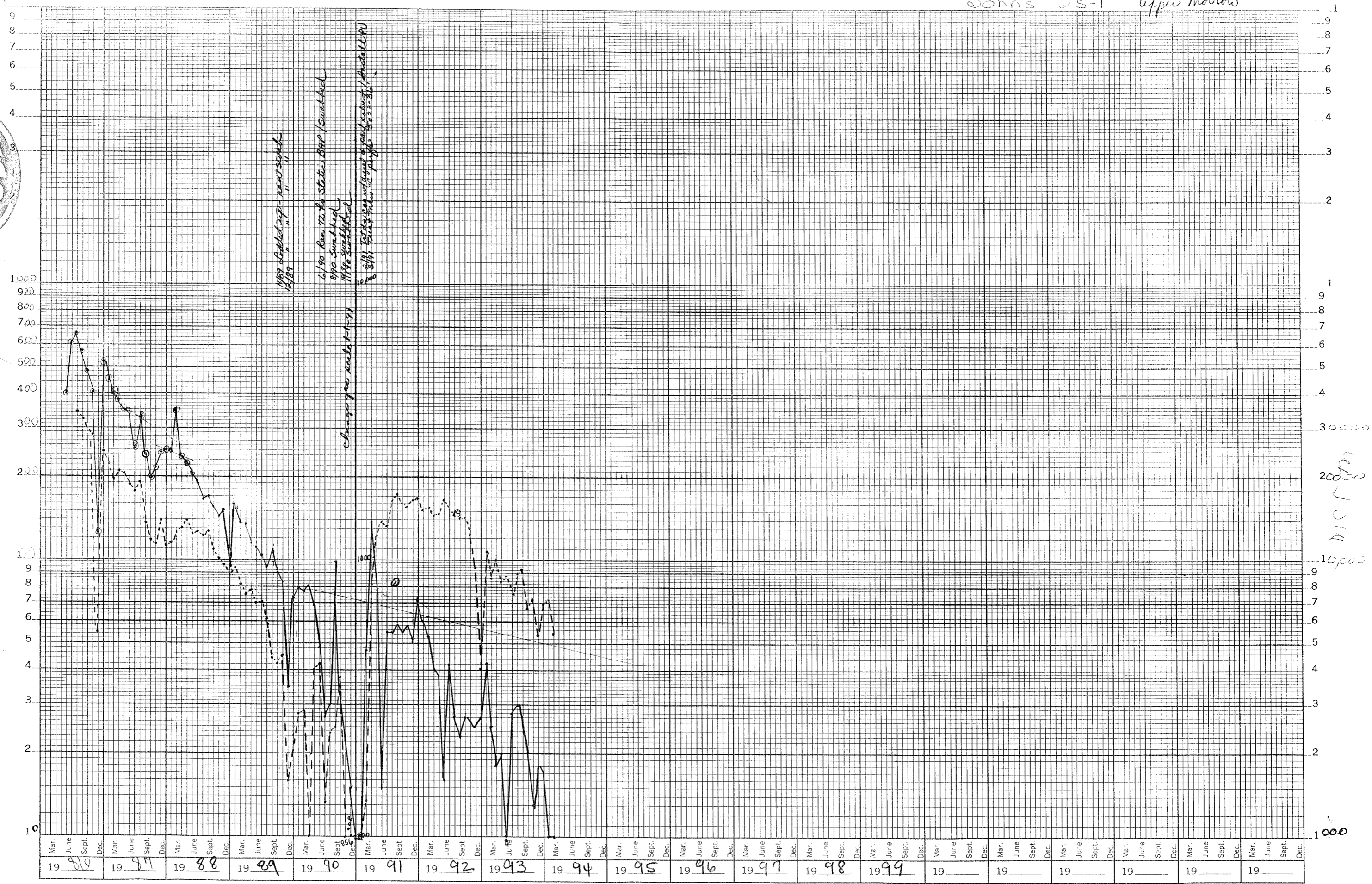
MCFM / BOPM





BOPM

Johns 25-1 upper narrow



20000
10000

1000

STATE OF KANSAS - CORPORATION COMMISSION
 PRODUCTION TEST & GOR REPORT

Conservation Division

Form C-5 Revised

TYPE TEST: ~~Block~~ Annual ~~Workover~~ ~~Reclassification~~ ~~Lease~~ DATE: 7-22-92
 Company: J. M. Huber Corporation Lease: Johns Well No.: 25-1
 County: Morton Location: 510' ENL & 1980 FEL Section: 25 Township: 31S Range: 41W Acres: 80
 Field: Reservoir Pipeline Connection: Colony Natural Gas ANGI
 Kinsler (U. Morrow) Morrow
 Completion Date: 12-24-85 Type Completion (Describe): Dual (Gas/Gas) Plug Back T.D.: 5648' Packer Set At: 5385'
 Production Method: Pumping Type Fluid Production: Oil & Gas & SW API Gravity of Liquid/Oil: 42.3
~~Flowing~~ ~~Block~~ ~~Gas~~
 Casing Size: 5-1/2 Weight: 14 I.D.: 5.012 Set At: 5690' Perforations: 5023' To: 5036'
 Tubing Size: 2-3/8 Weight: 4.7 I.D.: 1.995 Set At: 5079' Perforations: To

Pretest: Starting Date: Time: Ending Date: Time: Duration Hrs.:
 Test: Starting Date: 7-21-92 Time: 9:30 AM Ending Date: 7-22-92 Time: 9:30 AM Duration Hrs.: 24

OIL PRODUCTION OBSERVED DATA

Producing Wellhead Pressure		Separator Pressure			Choke Size					
Casing: 20 psi		Tubing:								
Bbls./In.	Tank	Starting Gauge			Ending Gauge			Net Prod. Bbls.		
	Size	Number	Feet	Inches	Barrels	Feet	Inches	Barrels	Water	Oil
Pretest:										
Test:										
Test:	400	154159	13	10	276.0	13	11	277.6	0	1.6

GAS PRODUCTION OBSERVED DATA

Orifice Meter Connections			Orifice Meter Range					
Pipe Taps:	Flange Taps: <input checked="" type="checkbox"/>		Differential: 50			Static Pressure: 500		
Measuring Device	Run-Prover-Tester	Orifice Size	Meter-Prover-Tester Pressure			Diff. Press.	Gravity	Flowing
			In. Water	In. Merc.	Psig or (Pd)	(hw) or (hd)	Gas (Gg)	Temp. (t)
Orifice Meter	3"	0.750			17.0	11.52	.825	60
Critical Flow Prover								
Orifice Well Tester								

GAS FLOW RATE CALCULATIONS (R)

Coeff. (Fb)(Fp)(OWTC)	Meter-Prover Press. (Psia)	Extension (Pm)	Gravity Factor (Fg)	Flowing Temp. Factor (Ft)	Deviation Factor (Fpv)	Chart Factor (Fc)
		$\sqrt{hw \times Pm}$				
2.740	31.4	15.01	1.101	1.000		
Gas Prod. MCFD	Flow Rate (R): 45	Oil Prod. Bbls./Day: 1.6	Gas/Oil Ratio (GOR) = 28.125	Cubic Ft per Bbl.		

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 22 day of July 1992

Jerry Hunt
 For Offset Operator

James Rapp
 For State

Jerry Hunt
 For Company