Case No.
2357

Large Exhibits

N.A.N.C.F. MICROGRAPHICS
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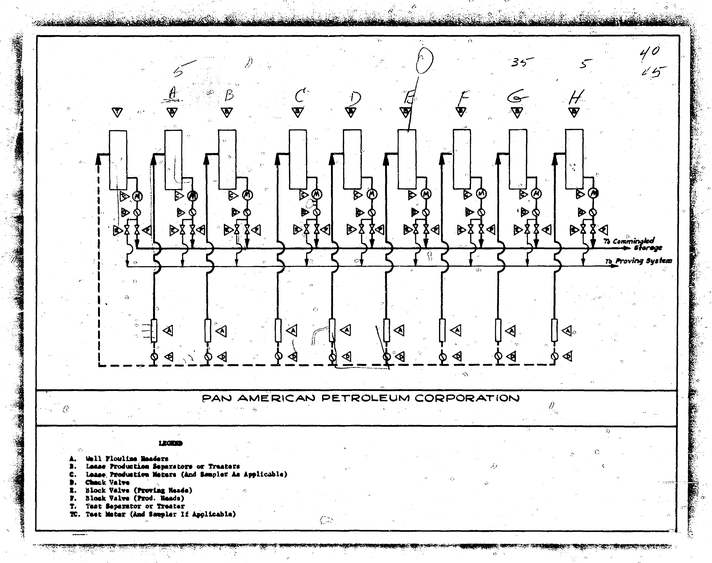


PAN AMERICAN PETROLEUM CORPORATION

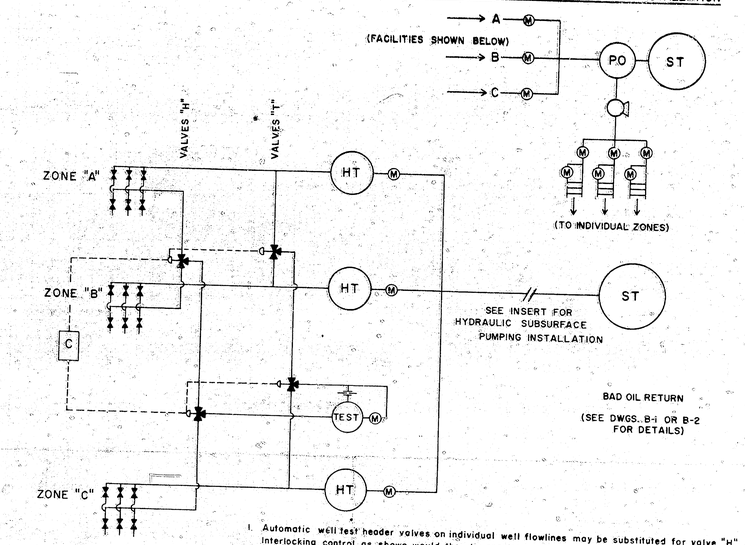
LEGEND

A. Well Flowline Headers
B. Lease Production Separators or Treaters
C. Lease Production Meters (And Sampler As Applicable)
D. Check Valve
E. Block Valve (Proving Heads)
F. Block Valve (Prod. Heads)
T. Test Separator or Treater
TC. Test Meter (And Sampler If Applicable)

W.H.M.C.F. MICROGRAPHICS

BEST AVAILABLE COPY

HYDRAULIC SUBSURFACE PUMPING INSTALLATION



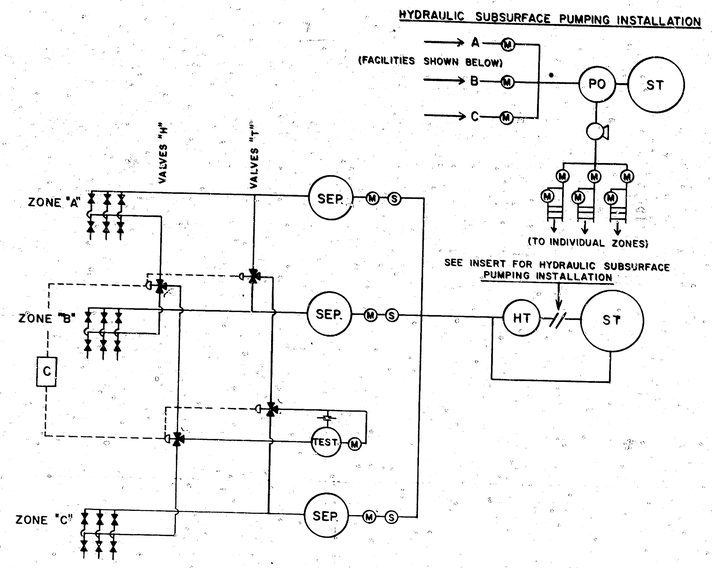
1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".

2. Manual, pneumatic, or electrical interlocks must be provided between the appropiate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.

SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- (M) LIQUIDS METER
- (TEST) TESTING VESSEL (HEAT-TREATER OR SEPARATOR)
- (HT) HEATER-TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (S) SAMPLER
- SEPARATOR

INDIVIDUAL TREATERS USED IN COMINGLING ZONES OF COMMON OR SEPARATE ROYALTIES		
NEW MEXICO OIL CONSERVATION COMMISION COMMITTEE ON COMINGLING		
DRAWN: H.M.S. APPROVED REVISED APPROVED	DATE: 5-4-61	DWG. NO. A-1



1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".

*2. Manual, pneumatic, or electrical interlocks must be provided between the appropiate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.

SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- (M) LIQUIDS METER
- (TEST) TESTING VESSEL (HEAT-TREATER OR SEPARATOR)
- (HT) HEATER-TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (S) SAMPLER
- (SEP) SEPARATOR

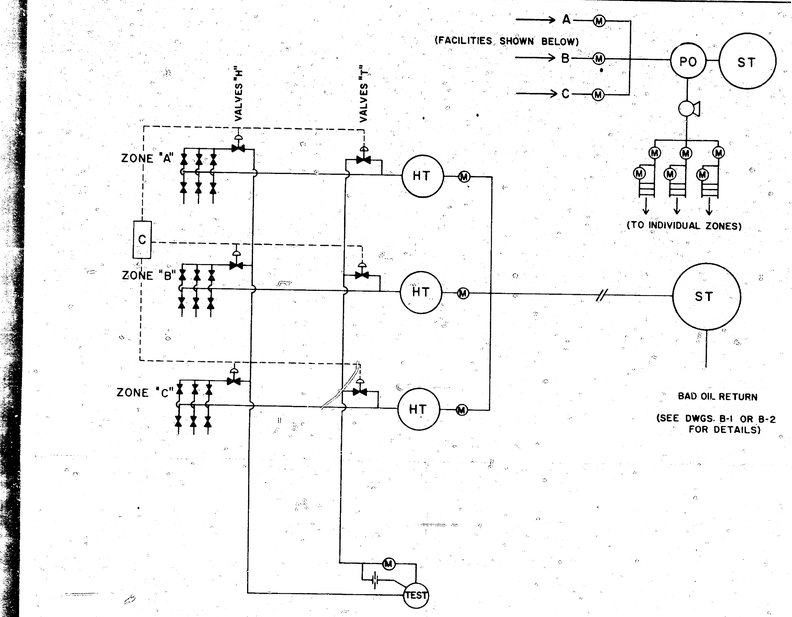
COMMON TREATER USED IN COMINGLING ZONES OF COMMON OR SEPARATE ROYALTIES

NEW MEXICO OIL CONSERVATION COMMISION
COMMITTEE ON COMINGLING

DRAWN: H. M. S.	DATE: 5-4-61	DWG. NO.
APPROVED		A-2
REVISED		
APPROVED		

W.H.M.C.F. MICROGRAPHICS
NOW AVAILABLE ONLY

HYDRAULIC SUBSURFACE PUMPING INSTALLATION



SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- C — CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- M — LIQUIDS METER
- TEST — TESTING VESSEL (HEAT-TREATER OR SEPARATOR)
- HT — HEATER-TREATER
- PO — POWER OIL TANK
- ST — STOCK TANK
- PUMP
- S — SAMPLER
- SEP — SEPARATOR

1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".

INDIVIDUAL TREATERS USED IN COMINGLING ZONES OF COMMON OR SEPARATE ROYALTIES WHEN MANUAL VALVES ARE NOT INSTALLED

NEW MEXICO OIL CONSERVATION COMMISION
COMMITTEE ON COMINGLING

DRAWN: H. M. S.	DATE: 5-4-61	DWG. NO. A-3
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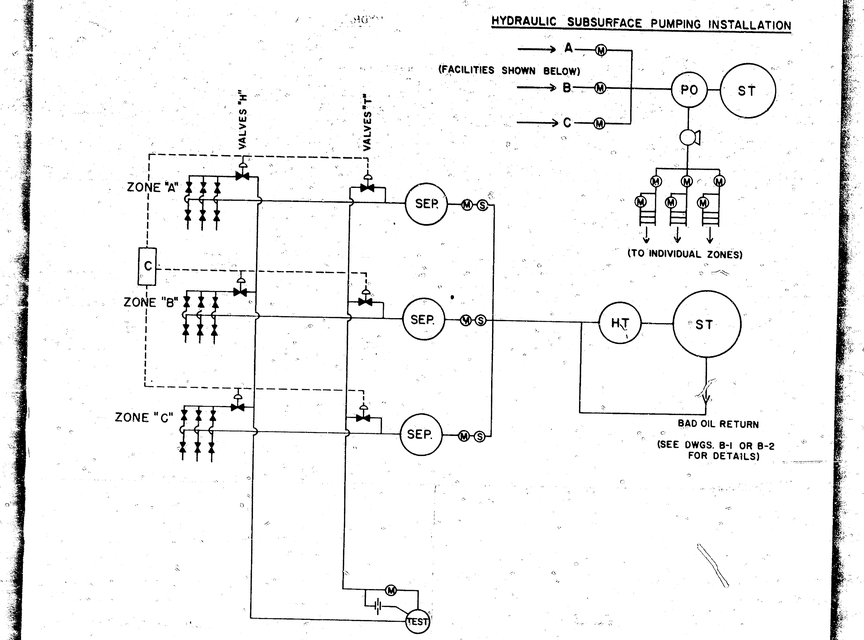
APPROVED		



1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".

SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- C — CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- M — LIQUIDS METER
- TEST — TESTING VESSEL (HEAT-TREATER OR SEPARATOR)
- HT — HEATER-TREATER
- PO — POWER OIL TANK
- ST — STOCK TANK
- PUMP
- S — SAMPLER
- SEP — SEPARATOR

COMMON TREATER USED IN COMINGLING ZONES OF COMMON OR SEPARATE ROYALTIES WHEN MANUAL VALVES ARE NOT INSTALLED

NEW MEXICO OIL CONSERVATION COMMISION
COMMITTEE ON COMINGLING

DRAWN: H. M'S	DATE: 5-4-61	DWG. NO.
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APPROVED:		

V.R.M.C.F. MICROGRAPHICS
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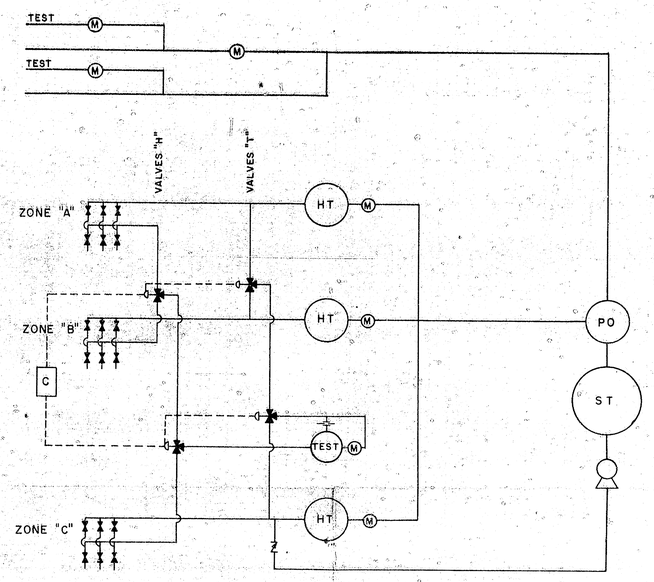

1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".

2. Manual, pneumatic, or electrical interlocks must be provided between the appropiate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.

SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- (M) LIQUIDS METER
- (TEST) TESTING VESSEL (HEAT-TREATER OR SEPARATOR)
- (HT) HEATER-TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (S) SAMPLER
- (SEP) SEPARATOR

INDIVIDUAL TREATERS USED IN COMINGLING ZONES OF COMMON ROYALTIES BY SUBTRACTION METHOD

NEW MEXICO OIL CONSERVATION COMMISION
COMMITTEE ON COMINGLING

DRAWN: H.M.S.	DATE: 5-4-61	DWG.NO.
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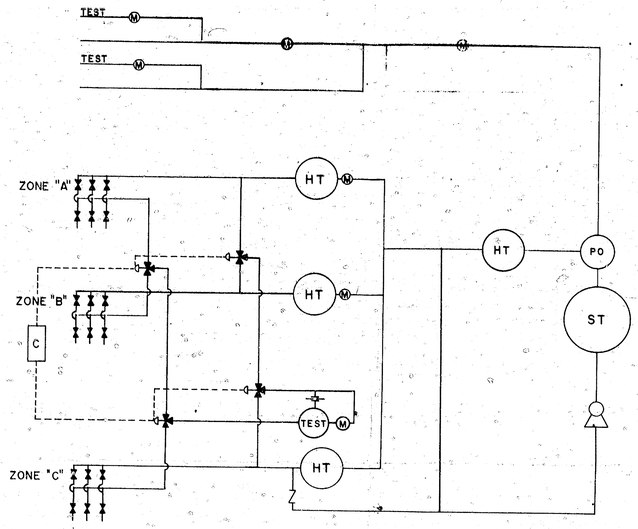
Received
Damaged.

V.R.N.C.F. MICROGRAPHICS



1. Automatic well test header valves on individual well flowlines may be substituted for valve "H", interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".

2. Manual, pneumatic, or electrical interlocks must be provided between the appropiate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.

SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- (M) LIQUIDS METER
- (TEST) TESTING VESSEL (HEAT-TREATER [illegible])
- (HT) HEATER-TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (S) SAMPLER
- (SEP) SEPARATOR

COMMON TREATER USED IN COMINGLING ZONES OF COMMON ROYALTIES BY SUBTRACTION METHOD

NEW MEXICO OIL CONSERVATION COMMISION
COMMITTEE ON COMINGLING

DRAWN: H M S	DATE: 5-4-61	DWG. NO.
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REVISED		
APPROVED		

Received
Damaged.

V.R.M.C.F. MICROGRAPHICS
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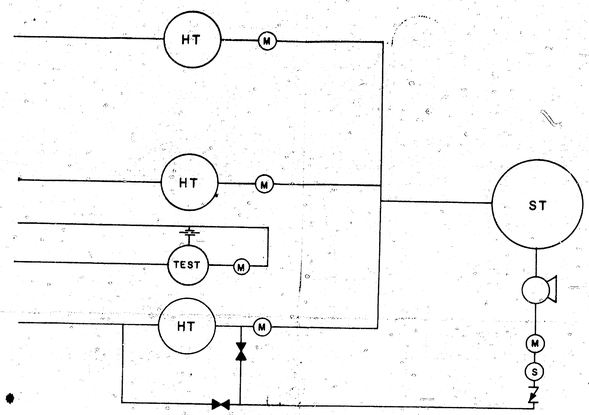

SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- C — CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- M — LIQUIDS METER
- TEST — TESTING VESSEL (HEAT-TREATER-SEPARATOR)
- HT — HEATER-TREATER
- PO — POWER OIL TANK
- ST — STOCK TANK
- PUMP
- S — SAMPLER
- SEP — SEPARATOR

BAD OIL RETURN (ALTERNATE NO. 1)

NEW MEXICO OIL CONSERVATION COMMISION
COMMITTEE ON COMINGLING

DRAWN: H.M.S	DATE: 5-4-61	DWG. NO. A-7
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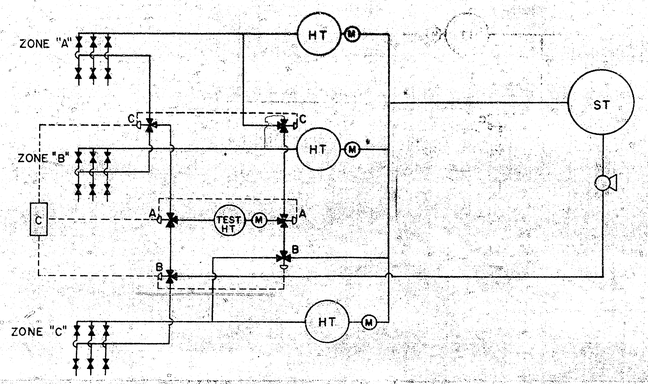
REVISED:		
APPROVED:		

Received
Damaged.

N.M.R.C.P. MICROGRAPHICS



SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- C — CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- M — LIQUIDS METER
- TEST — TESTING VESSEL (HEAT-TREATER OR SEPARATOR)
- HT — HEATER-TREATER
- PO — POWER OIL TANK
- ST — STOCK TANK
- PUMP
- S — SAMPLER
- SEP — SEPARATOR

SCHEMATIC RETURN (ALTERNATE NO. 2)
WHEN TEST TREATER IS INSTALLED

NEW MEXICO OIL CONSERVATION COMMISION
COMMITTEE ON COMINGLING

DRAWN H.M.S.	DATE: 5-4-61	DWG. NO. A-8
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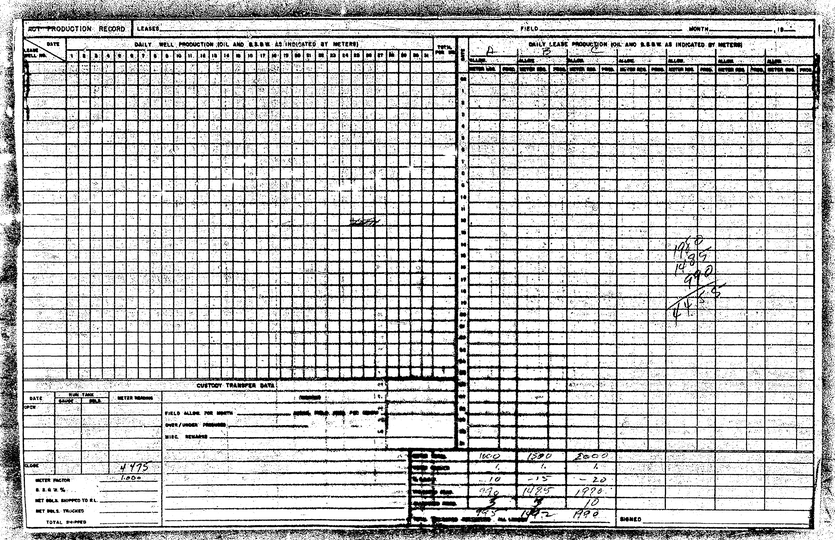
APPROVED		

Received
Damaged.

V.R.M.C.F. MICROGRAPHICS



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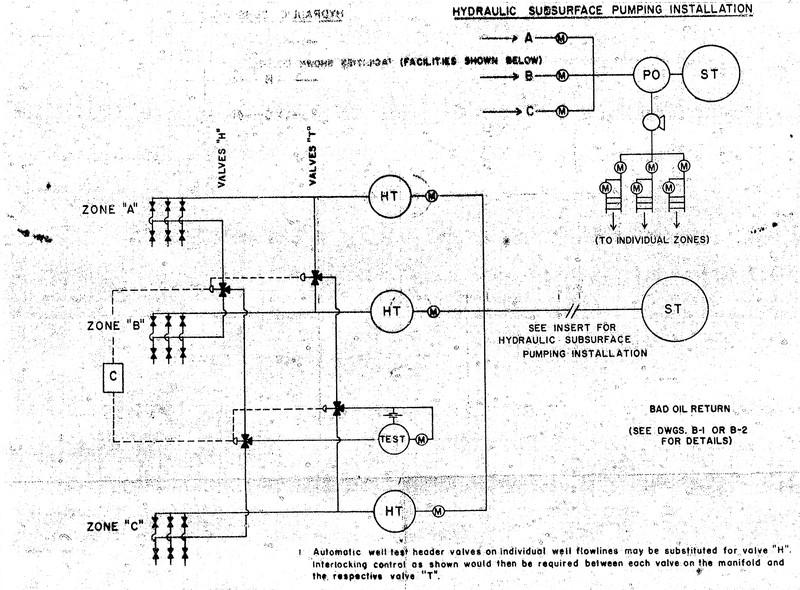
U.S.B.C.F. MICROGRAPHICS

HYDRAULIC SUBSURFACE PUMPING INSTALLATION



1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".

2. Manual, pneumatic, or electrical interlocks must be provided between the appropiate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.

SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE
- 3 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- ORIFICE METER
- (M) LIQUIDS METER
- (TEST) TESTING VESSEL (HEAT-TREATER OR SEPARATOR)
- (HT) HEATER-TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (S) SAMPLER
- (SEP) SEPARATOR

INDIVIDUAL TREATERS USED IN COMINGLING ZONES OF COMMON OR SEPARATE ROYALTIES		
NEW MEXICO OIL CONSERVATION COMMISION COMMITTEE ON COMINGLING		
DRAWN: H. M. S.	DATE: 5-4-61	DWG. NO.
APPROVED		A-1
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APPROVED		

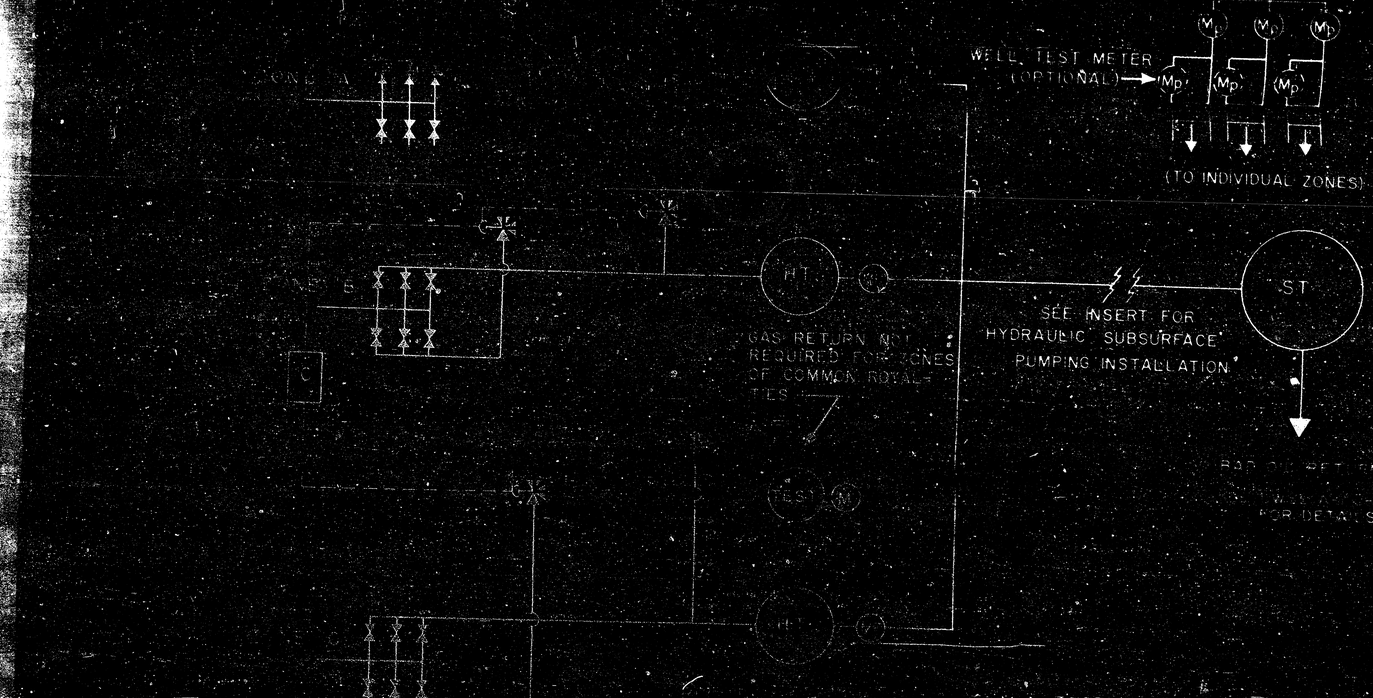
Received
Damaged.

N.M.O.C.C. MICROGRAPHICS

Case No.
2356
Large Exhibit

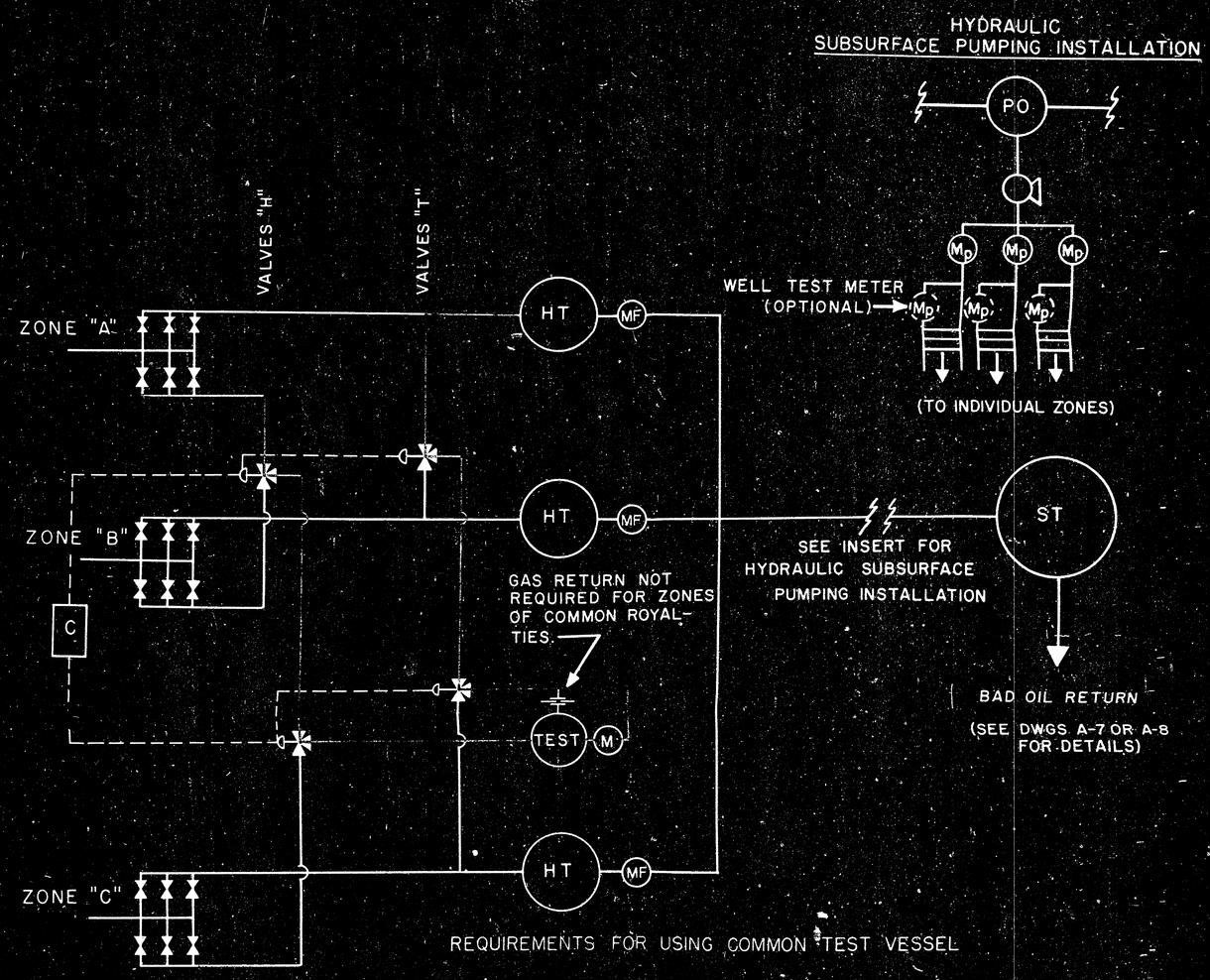
Received
Damaged.

M.R.M.C.F. MICROGRAPHICS



RED LINE INDICATES PATH FOLLOWED BY PRODUCTION FROM A ZONE "A" WELL WHILE ON TEST.

U.S.B.M.C.F. MICROGRAPHICS



REQUIREMENTS FOR USING COMMON TEST VESSEL

1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".
2. Manual, pneumatic, or electrical interlocks must be provided between the appropriate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.
3. Manual overides on automatic well test header valves on individual well flowlines may be installed on production side only.

SYMBOLS

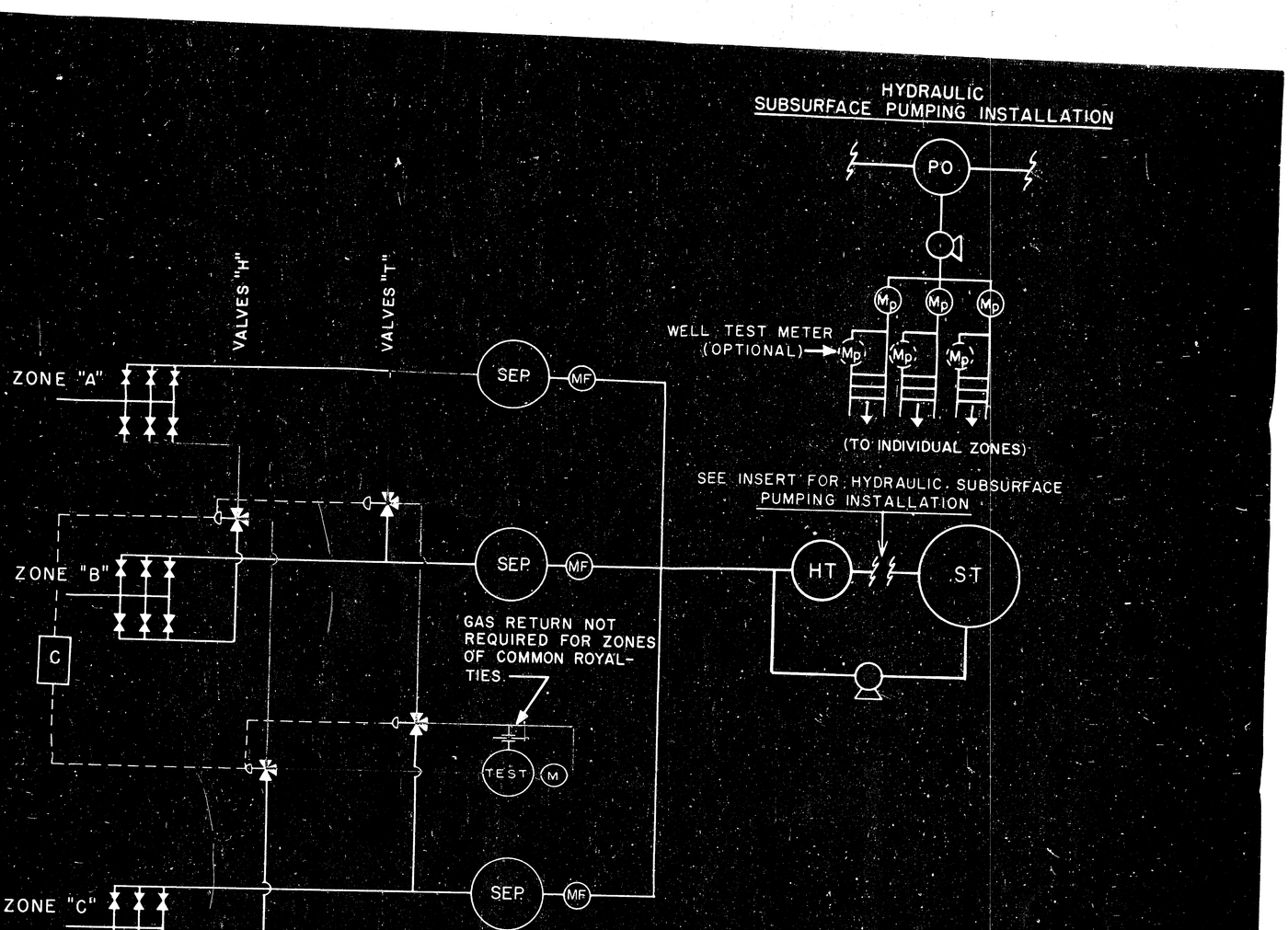
- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- (M) TEST METER
- (Mp) METER FOR POWER OIL
- (TEST) TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- (HT) HEATER TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (SEP) SEPARATOR
- (MF) METERING FACILITIES (METER AND SAMPLER, IF APPLICABLE)

RED LINE INDICATES PATH FOLLOWED BY PRODUCTION FROM A ZONE "A" WELL WHILE ON TEST.

INDIVIDUAL TREATERS USED IN COMMINGLING COMMON OR SEPARATE ROYALTIES

NEW MEXICO OIL CONSERVATION COMMISSION
COMMITTEE ON COMMINGLING

DRAWING A-1



REQUIREMENTS FOR USING COMMON TEST VESSEL

1. Automatic well test header valves on individual well flowlines may be substituted for valve "H" interlocking control as shown would then be required between each valve on the manifold and the respective valve "T"
2. Manual, pneumatic, or electrical interlocks must be provided between the appropriate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.
3. Manual overides on automatic well test header valves on individual well flowlines may be installed on production side only.

SYMBOLS

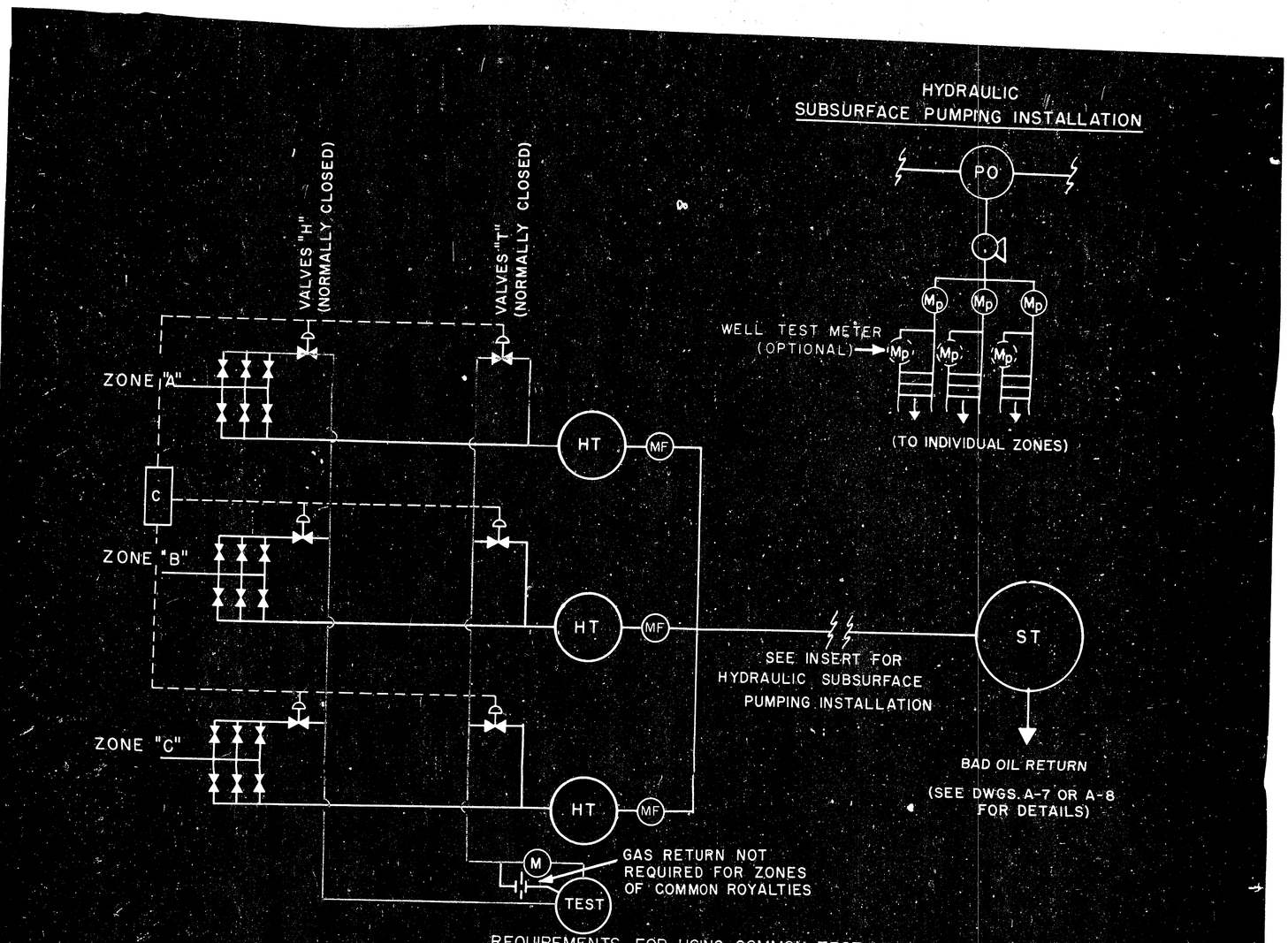
- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- (M) TEST METER
- (Mp) METER FOR POWER OIL
- (TEST) TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- (HT) HEATER TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (SEP) SEPARATOR
- (MF) METERING FACILITIES (METER & SAMPLER IF APPLICABLE)

RED LINE INDICATES PATH FOLLOWED BY PRODUCTION FROM A ZONE "A" WELL WHILE ON TEST.

COMMON TREATER USED IN COMMINGLING COMMON OR SEPARATE ROYALTIES

NEW MEXICO OIL CONSERVATION COMMISSION
COMMITTEE ON COMMINGLING

DRAWING A-2



REQUIREMENTS FOR USING COMMON TEST VESSEL

1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".
2. Control panel designed to permit opening of only one pair of valves "H" and "T" at any time.
3. Manual overides on automatic well test header valves on individual well flowlines may be installed on production side only.

SYMBOLS

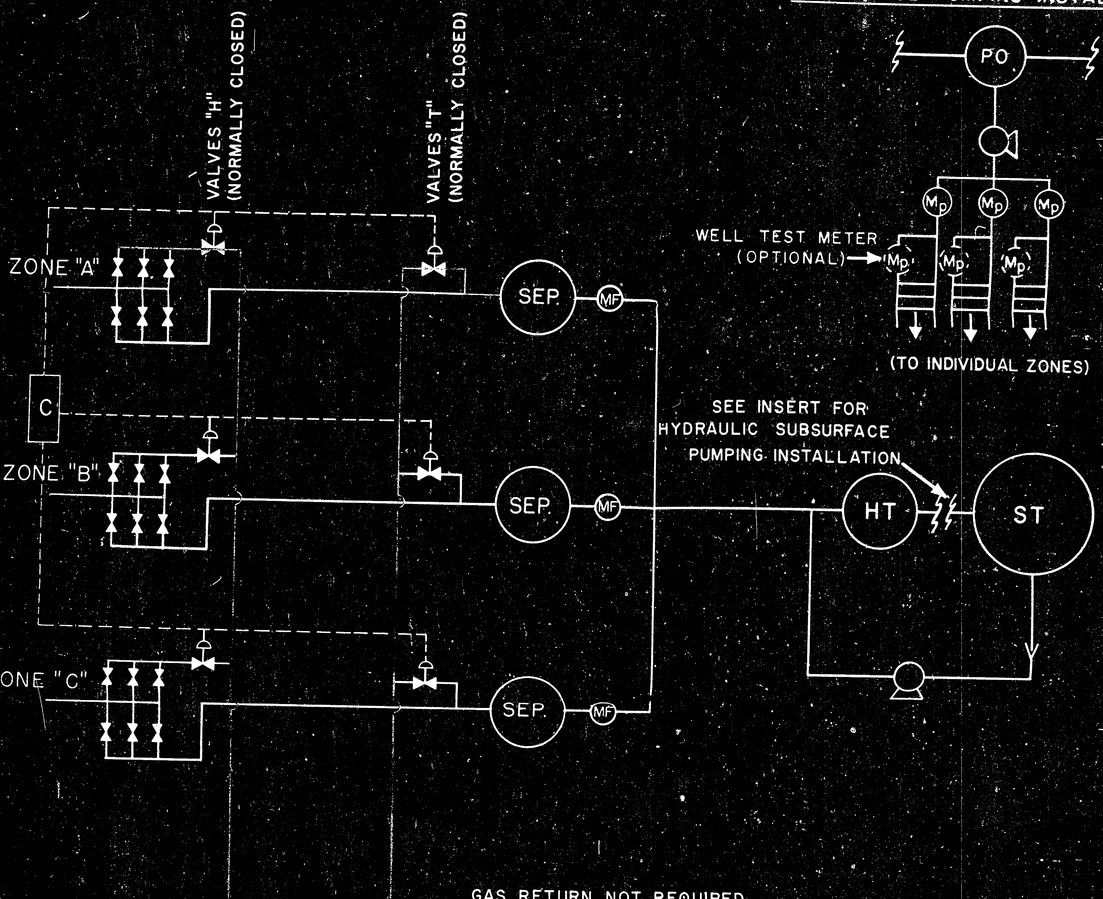
- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- C — CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- M — TEST METER
- Mp — METER FOR POWER OIL
- TEST — TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- HT — HEATER TREATER
- PO — POWER OIL TANK
- ST — STOCK TANK
- PUMP
- SEP — SEPARATOR
- MF — METERING FACILITIES (METER & SAMPLER IF APPLICABLE)

RED LINE INDICATES PATH FOLLOWED BY PRODUCTION FROM A ZONE "A" WELL WHILE ON TEST.

INDIVIDUAL TREATERS USED IN COMMINGLING COMMON OR SEPARATE ROYALTIES WHEN NORMALLY CLOSED; TWO WAY VALVES ARE INSTALLED

NEW MEXICO OIL CONSERVATION COMMISSION
COMMITTEE ON COMMINGLING

DRAWING A-3



REQUIREMENTS FOR USING COMMON TEST VESSEL

1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".
2. Control panel designed to permit opening of only one pair of valves "H" and "T" at any time.
3. Manual overides on automatic well test header valves on individual well flowlines may be installed on production side only.

SYMBOLS

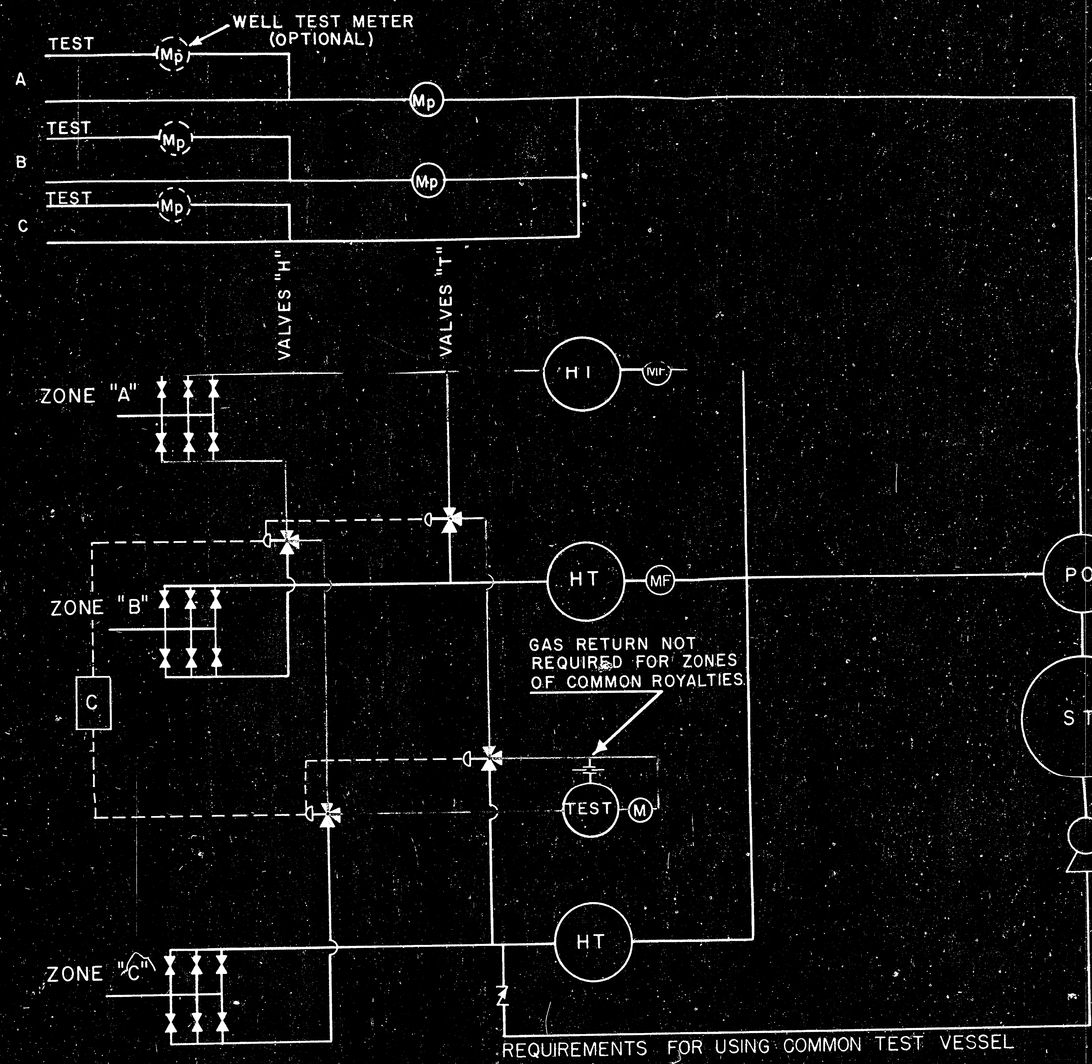
- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- C — CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- (M) TEST METER
- (Mp) METER FOR POWER OIL
- (TEST) TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- (HT) HEATER TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (SEP) SEPARATOR
- (MF) METERING FACILITIES (METER & SAMPLER IF APPLICABLE)

RED LINE INDICATES PATH FOLLOWED BY PRODUCTION FROM A ZONE "A" WELL WHILE ON TEST.

COMMON TREATER USED IN COMMINGLING COMMON OR SEPARATE ROYALTIES WHEN NORMALLY CLOSED, TWO WAY VALVES ARE INSTALLED

NEW MEXICO OIL CONSERVATION COMMISSION
COMMITTEE ON COMMINGLING

DRAWING A-4



REQUIREMENTS FOR USING COMMON TEST VESSEL

1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".
2. Manual, pneumatic, or electrical interlocks must be provided between the appropriate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.
3. Manual overides on automatic well test header valves on individual well flowlines may be installed on production side only.
4. If normally closed, two-way valves are to be installed, refer to drawing A-3.

SYMBOLS

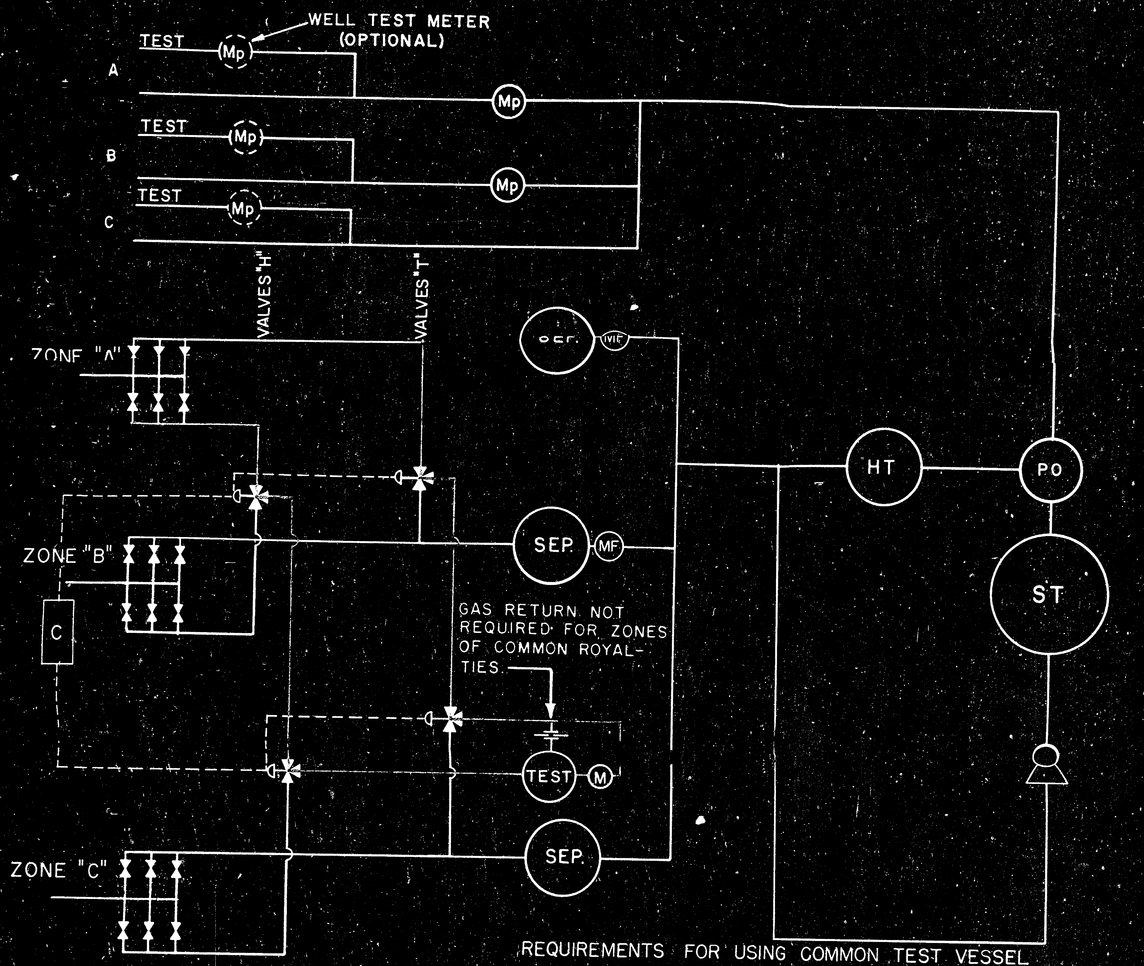
- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED).
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- (M) TEST METER
- (Mp) METER FOR POWER OIL
- (TEST) TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- (HT) HEATER TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (SEP) SEPARATOR
- (MF) METERING FACILITIES (METER AND SAMPLER, IF APPLICABLE)

RED LINE INDICATES PATH FOLLOWED BY PRODUCTION FROM A ZONE "A" WELL WHILE ON TEST.

INDIVIDUAL TREATERS USED IN COMMINGLING ZONES OF COMMON ROYALTIES BY SUBTRACTION METHOD

NEW MEXICO OIL CONSERVATION COMMISSION
COMMITTEE ON COMMINGLING

DRAWING A-5



REQUIREMENTS FOR USING COMMON TEST VESSEL

1. Automatic well test header valves on individual well flowlines may be substituted for valve "H". Interlocking control as shown would then be required between each valve on the manifold and the respective valve "T".
2. Manual, pneumatic, or electrical interlocks must be provided between the appropriate valve "H" and valve "T" as shown. Control panel [C] and control lines to valves are not required if mechanical interlock is provided for manual operation.
3. Manual overides on automatic well test header valves on individual well flowlines may be installed on production side only.
4. If normally closed, two-way valves are to be used, refer to drawing A-4.

SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- [C] CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- (M) TEST METER
- (Mp) METER FOR POWER OIL
- (TEST) TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- (HT) HEATER TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (MF) METERING FACILITIES (METER AND SAMPLER, IF APPLICABLE)
- (SEP.) SEPARATOR

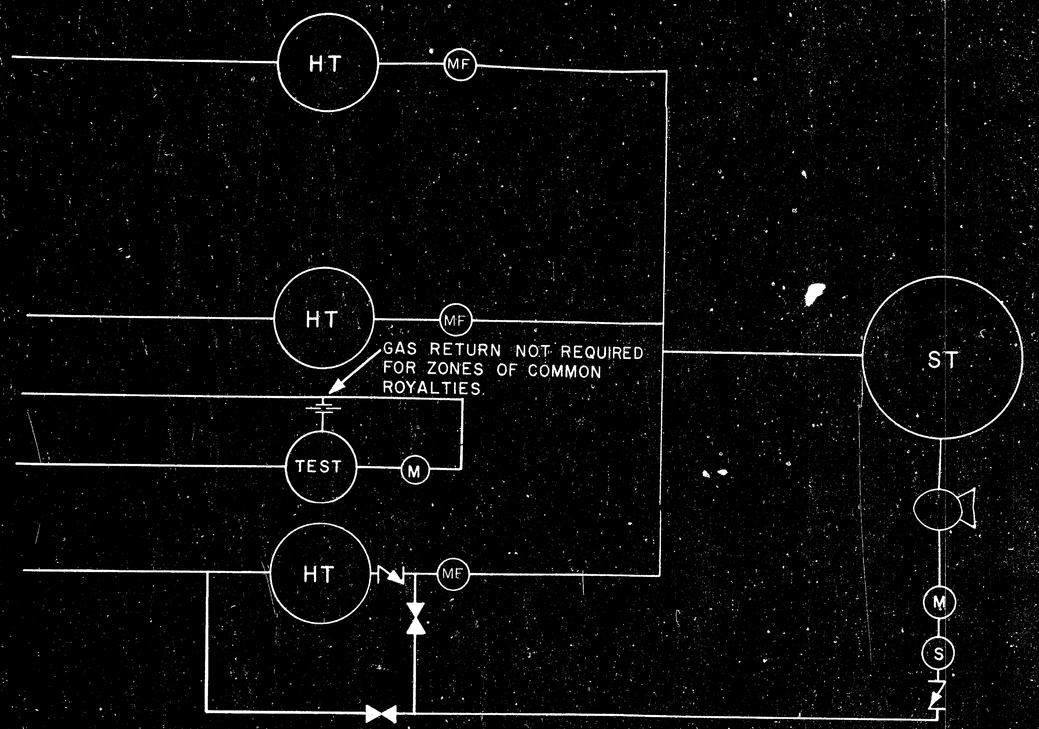
RED LINE INDICATES PATH FOLLOWED BY PRODUCTION FROM A ZONE "A" WELL WHILE ON TEST.

COMMON TREATER USED IN COMMINGLING ZONES OF COMMON ROYALTIES BY SUBTRACTION METHOD

NEW MEXICO OIL CONSERVATION COMMISSION
COMMITTEE ON COMMINGLING

DRAWING A-6

A.R.C.P. REPRODUCTIONS



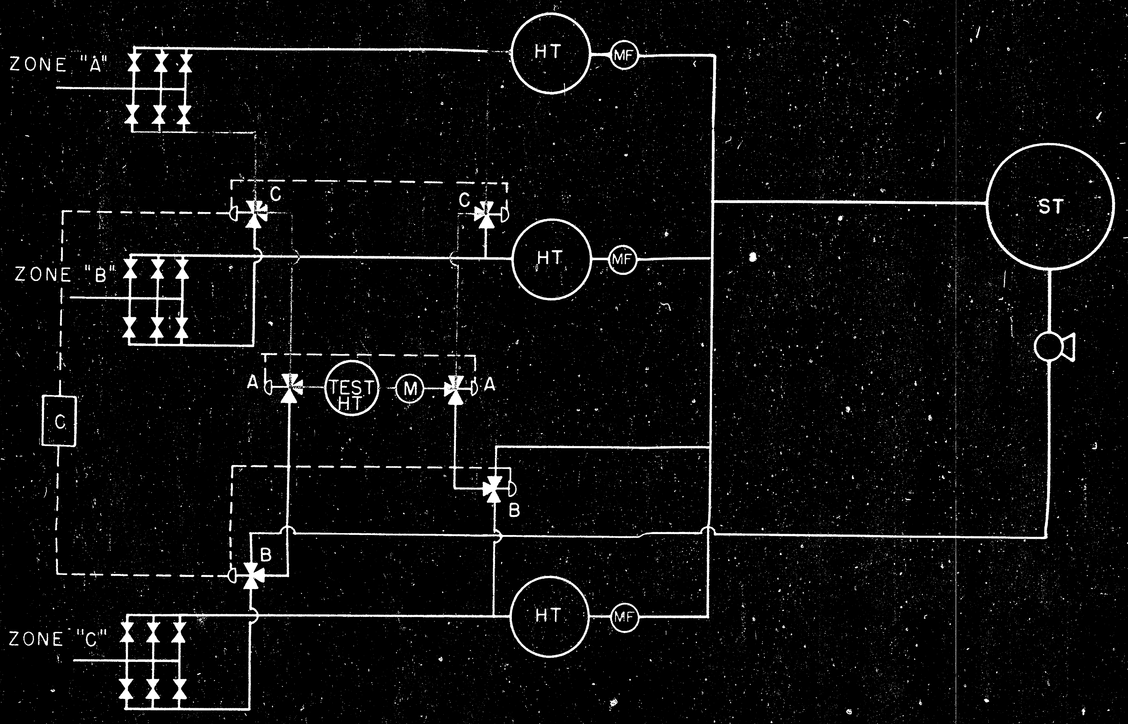
SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- C — CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- (M) — TEST OR BAD OIL METER
- (Mp) — METER FOR POWER OIL
- (TEST) — TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- (HT) — HEATER TREATER
- (PO) — POWER OIL TANK
- (ST) — STOCK TANK
- PUMP
- (S) — SAMPLER
- (SEP) — SEPARATOR
- (MF) — METERING FACILITIES (METER & SAMPLER IF APPLICABLE)

BAD OIL RETURN (ALTERNATE NO. 1)

NEW MEXICO OIL CONSERVATION COMMISSION
COMMITTEE ON COMMINGLING

DRAWING A-7



SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- C — CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- (M) TEST METER
- (Mp) METER FOR POWER OIL
- (TEST) TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- (HT) HEATER TREATER
- (PO) POWER OIL TANK
- (ST) STOCK TANK
- PUMP
- (SEP) SEPARATOR
- (MF) METERING FACILITIES (METER & SAMPLER IF APPLICABLE)

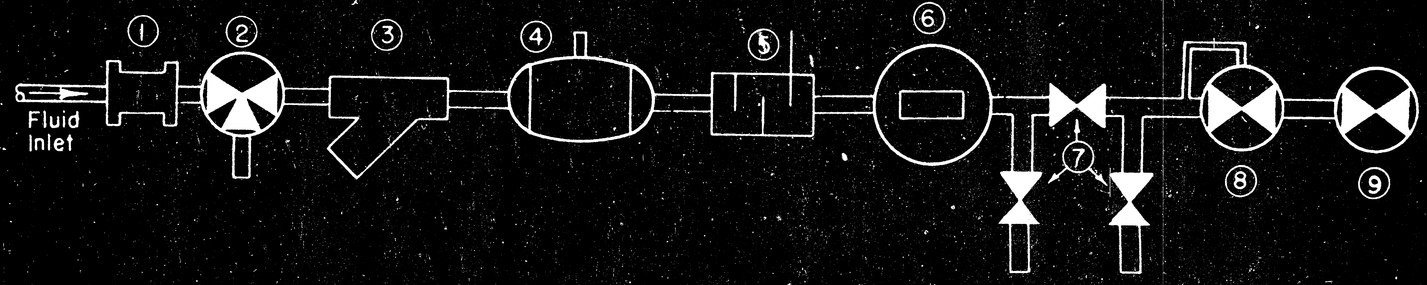
RED LINE INDICATES PATH FOLLOWED BY PRODUCTION FROM A ZONE "A" WELL WHILE ON TEST.

BAD OIL RETURN (ALTERNATE NO.2)
WHEN TEST TREATER IS INSTALLED

NEW MEXICO OIL CONSERVATION COMMISSION
COMMITTEE ON COMMINGLING

DRAWING A-8

POSITIVE-DISPLACEMENT METER SYSTEM



LEGEND

① BS & W Monitor (Optional)
② Reroute Valve (Optional) for rerouting non-merchantable oil
③ Strainer
④ Air & Gas Eliminator (If Needed) with Check in Vent
⑤ Sample Probe
⑥ P.D. Meter with Non-Reset Counter
⑦ Proving Connections
⑧ Flow Rate Controller
⑨ Dump Valve

Note:

No. 3 & 4 can be combined
No. 8 & 9 can be combined

DRAWING A-9

WEATHERING TEST

TEXACO Inc. — STATE OF NEW MEXICO "L" & "M" LEASES — VACUUM POOL

Date & Time	Hours	Gauge	Temperature	Observed Gravity	Tank Chart Volume (Bbls.)	Gravity @ 60°F	Volume @ 60°F (Bbls)	% Change in Initial Volume @60°F.
6-1-61 9:00 a.m.	0	7'-4-15/32"	79	38.7	244.43	37.3	242.13	
10:00 a.m.	1	7'-4-15/32"	83	39.0	244.43	37.3	241.64	-.2023
11:00 a.m.	2	7'-4-15/32"	82	38.8	244.43	37.1	241.76	-.1528
12:00 a.m.	3	7'-4-15/32"	84	38.9	244.43	37.1	241.52	-.2519
1:00 p.m.	4	7'-4-15/32"	83	39.0	244.43	37.3	241.64	-.2023
5:00 p.m.	8	7'-4-17/32"	84	39.0	244.61	37.2	241.69	-.1817
9:00 p.m.	12	7'-4-17/32"	81	39.0	244.61	37.4	242.06	-.0289
6-2-61 9:00 a.m.	24	7'-4-16/32"	82	39.0	244.52	37.3	241.85	-.1156
6-3-61 9:00 a.m.	48	7'-4-13/32"	80	38.8	244.26	37.3	241.84	-.1197

TEXACO Inc.

WEATHERING TEST

C. E. PENNY NCT-4 LEASE — JUSTIS ELLENBURGER & JUSTIS MCKEE POOLS

Date & Time		Hours	Gauge	Temperature	Observed Gravity	Tank Chart Volume (Bbls.)	Gravity @ 60°F.	Volume @ 60°F (Bbls)	% Change in Initial Volume @60°F.
6-3-61	1:20 a.m.		7'-6-4/8"	73	46.0	156.19	44.9	155.17	
	3:55 a.m.	0	8'-11-7/8"	71	45.5	185.61	44.6	184.59	
	4:55 a.m.	1	8'-11-7/8"	70	45.5	185.61	44.6	184.68	⁄.0487
	6:15 a.m.	2:20	8'-11-6/8"	68	44.5	185.40	44.8	184.66	⁄.0379
	7:30 a.m.	3:35	8'-11-6/8"	74	46.0	185.40	44.8	184.10	-.2654
	8:30 a.m.	4:35	8'-11-6/8"	75	46.0	185.40	44.7	184.01	-.3142
	12:10 p.m.	8:15	8'-11-5/8"	81	46.5	185.19	44.7	183.26	-.7205
	4:00 p.m.	12:05	8'-11-4/8"	87	47.0	184.98	44.6	182.50	-1.1322
6-4-61	5:00 a.m.	25:05	8'-11-3/8"	76	46.0	184.77	44.6	183.29	-.7042
6-5-61	4:40 a.m.	48:45	8'-11-2/8"	78	46.0	184.56	44.4	182.92	-.9047

TEXACO Inc.

WEATHERING TESTS

STATE OF NEW MEXICO "G" LEASE

MONUMENT POOL

Hours	Gauge	Temperature	Observed Gravity	Tank Chart Volume (Bbls)	Gravity @ 60°F	Volume @ 60°F (Bbls)	% Change in Initial Volume @ 60°F
- 2.5	13'-5-12/16"	81	33.2	445.45	31.8	441.75	
0	14'-7-12/16"	90	34.0	483.97	31.9	478.21	
1	14'-7-11/16"	96	34.4	483.79	31.9	476.87	-.2802
2	14'-7-11/16"	101	35.2	483.79	32.3	475.95	-.4725
4	14'-7-11/16"	100	34.6	483.79	31.8	476.15	-.4307
8	14'-7-11/16"	98	34.3	483.79	31.7	476.53	-.3513
12	14'-7-10/16"	80	33.1	483.45	31.7	479.63	⁄.2969
24	14'-7-4/16"	83	33.5	482.60	31.9	478.21	0
48	14'-7-1/16"	85	33.6	482.08	31.9	477.31	-.1882