JMP TEST SUMMARY

Pumping Unit: Double Diamond Date: 5-12-94

Address of Owner: S. King

Total Dynamic Head:

G. Dovel

~~S. Chapman~~ left

All ok
Cippoletti
Weir 36" Weir
.49 Ahead
3.46
= 1553.

a) pumping water level:

Fisher or steel tape (ft) static _____ pumping _____ ft
b) discharge pres.: IDWR gage _____ psi x 2.31 = _____ ft
c) press. gauge height (from center line of disch. pipe) _____ ft
d) friction losses (pump intake to pressure gauge) _____ ft

TDH = (a + b + c + d) = _____ ft

(see below) Q = _____ gpm

OHP = Q x TDH / 3960 = _____ hp

(see attached data) IHP = _____ hp

Eff. = OHP / IHP x 100 = _____ %

Electric Powered Pump Standards for Tested Efficiencies
(from Pacific Gas and Electric Company
77 Beale Street, San Francisco, California 94106)

Motor Size (HP)	Ratings: Low	Fair	Good	Excellent
3-5	41.9 or less	42-49.9	50-54.9	55 or above
7.5-10	44.9 or less	45-52.9	53-57.9	58 or above
15-30	47.9 or less	48-55.9	56-60.9	61 or above
40-60	52.9 or less	53-59.9	60-64.9	65 or above
75 +	55.9 or less	56-62.9	63-68.9	69 or above

9.87
2.9
1277

Other flow meter data:

Amount _____ units _____ seconds 1) _____ 2) _____ 3) _____ Ave _____

Type McCrometer Computed Flow Rate 1160 gpm

FLOW MEASUREMENT

OD = 10.14"
Thick = 0.135"

Inside Dia. (D) = 9.87 in

Inside radius IR = 4.935 in

Station Factors (F)	Stations (IR x F) dec	in	Velocity (V) R	L
A) 0.051		.25		3.5
B) 0.163		.80		4.0
C) 0.293*		1.45		4.25
D) 0.453		2.24		4.5
E) 0.684		3.38		4.88
F) 1.316		6.49		5.32
G) 1.547		7.63		5.38
H) 1.707*		8.424	5.05	5.10
I) 1.837		9.07		4.85
J) 1.949		9.62		3.2
Average Velocity (V):				4.50

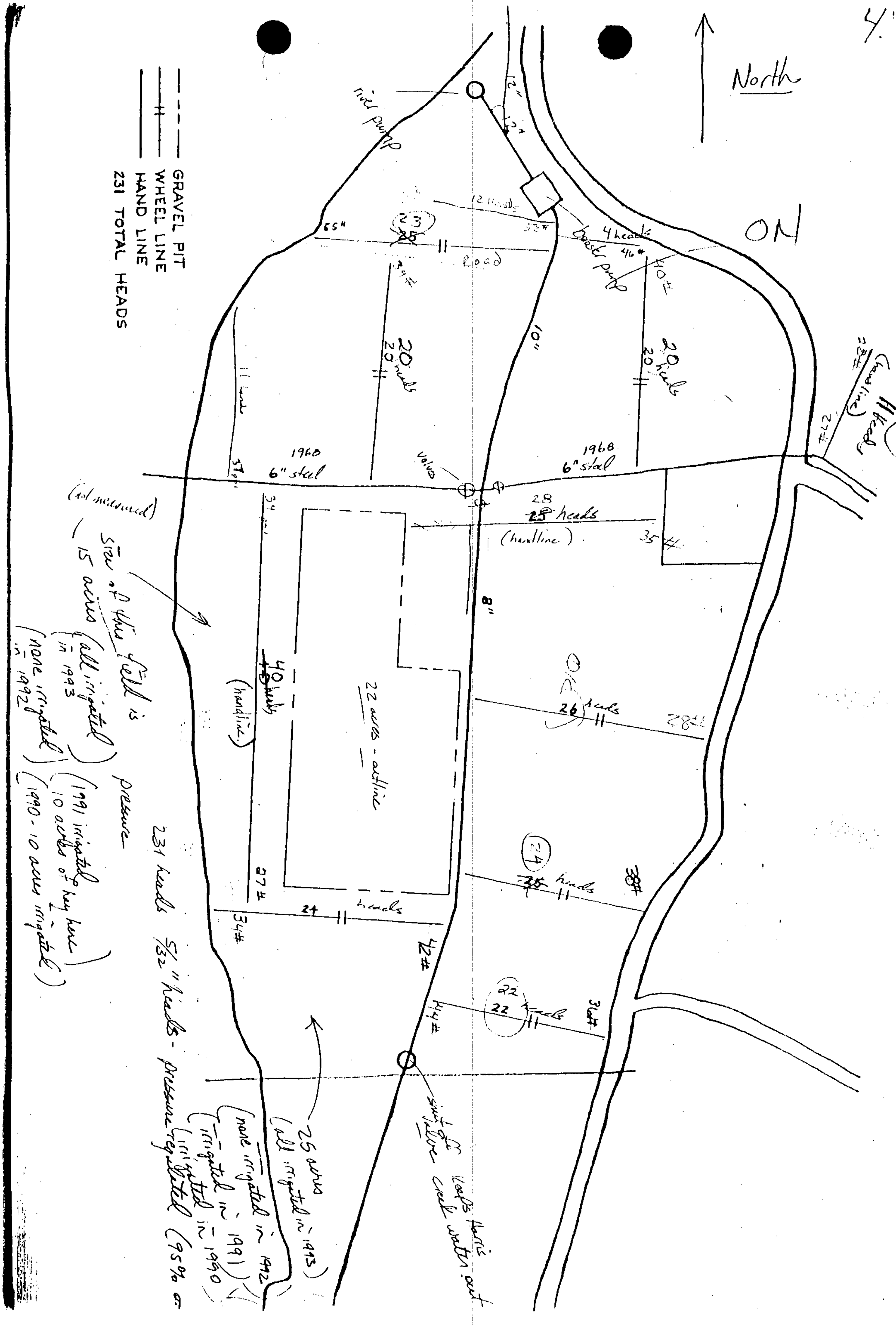
* two-point method

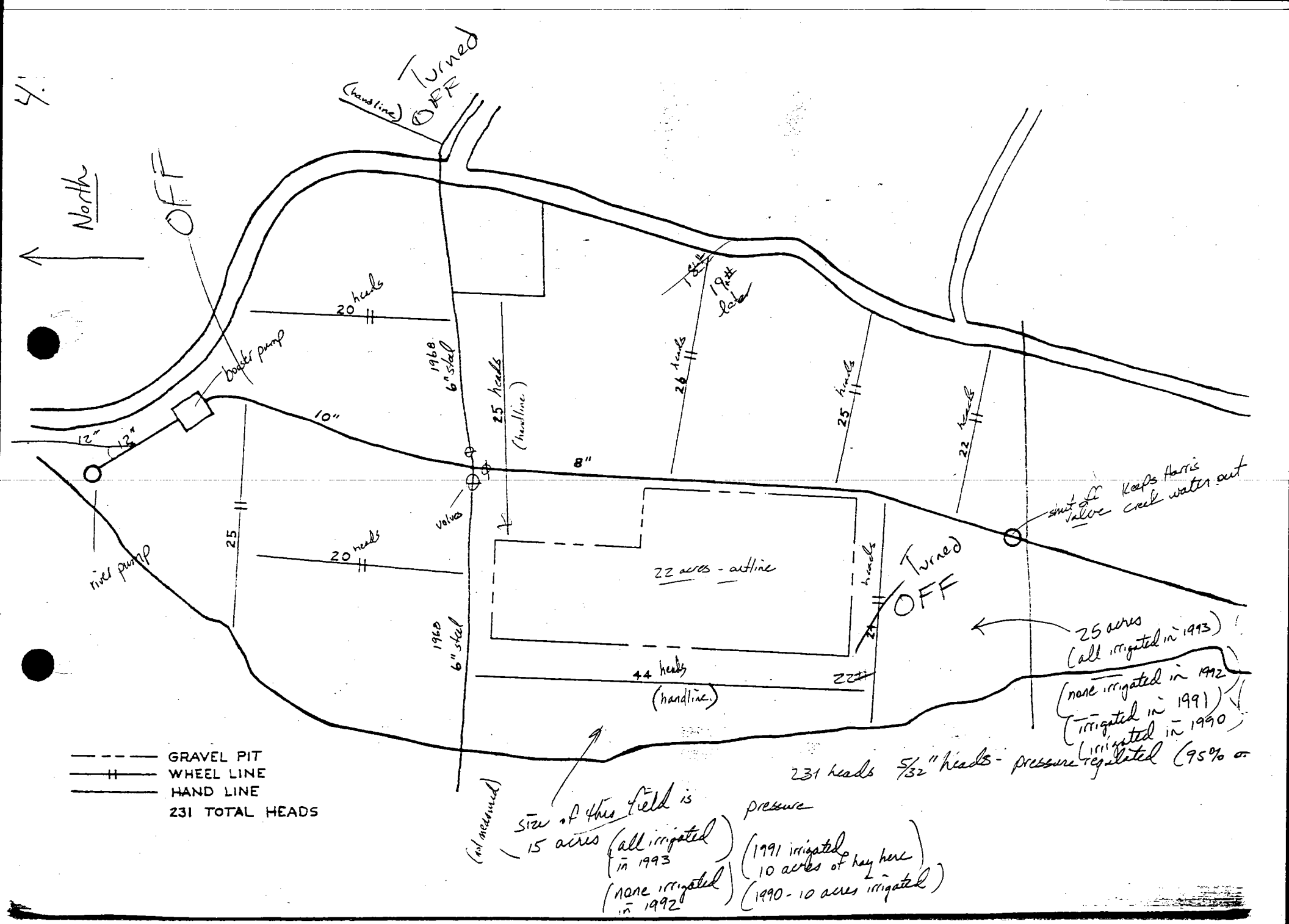
DECIMAL TO FRACTION CONVERSIONS (TO 1/16 INCH)

0.0000 - 0.0313	0
0.0313 - 0.0938	1/16
0.0938 - 0.1563	1/8
0.1563 - 0.2188	3/16
0.2188 - 0.2813	1/4
0.2813 - 0.3438	5/16
0.3438 - 0.4063	3/8
0.4063 - 0.4688	7/16
0.4688 - 0.5313	1/2
0.5313 - 0.5938	9/16
0.5938 - 0.6563	5/8
0.6563 - 0.7188	11/16
0.7188 - 0.7813	3/4
0.7813 - 0.8438	13/16
0.8438 - 0.9063	7/8
0.9063 - 0.9688	15/16
0.9688 - 1.0000	1

V (Hall) = _____

Flow: Q = 2.451 x V x $(DIA)^2$ x _____ corr. factor = 1074 gpm


North
ON
GRAVEL PIT
WHEEL LINE
HAND LINE
231 TOTAL HEADS
river pump
booster pump
12"
10"
8"
Road
12 heads
4 heads
20 heads
20 heads
1968 6" steel
1968 6" steel
valves
28 heads
(handline)
26 heads
24 heads
24 heads
22 heads
40 heads
(handline)
22 acres - outline
(not measured)
Size of this field is 15 acres (all irrigated in 1993)
(1991 irrigated 10 acres of hay here)
(none irrigated in 1992)
(1990 - 10 acres irrigated)
231 heads 5/32" heads - pressure regulated (95% or
25 acres (all irrigated in 1993)
(none irrigated in 1992)
(irrigated in 1991)
(irrigated in 1990)
leaks (?) creek water out
A


4'
North
OFF
Turned OFF
(hand line)
20 heads
booster pump
1968 6" steel
25 heads (handline)
19th laid
26 heads
25 heads
22 heads
12"
12"
10"
8"
Valves
shut off valve
Keeps Harris creek water out
river pump
25
20 heads
22 acres - outline
Turned OFF
25 acres (all irrigated in 1993) (none irrigated in 1992) (irrigated in 1991) (irrigated in 1990) (irrigated (95% of
1960 6" steel
44 heads (handline)
22
231 heads 5/32" heads - pressure regulated
GRAVEL PIT
WHEEL LINE
HAND LINE
231 TOTAL HEADS
(not measured)
size of this field is 15 acres (all irrigated in 1993) (none irrigated in 1992)
pressure (1991 irrigated 10 acres of hay here) (1990 - 10 acres irrigated)