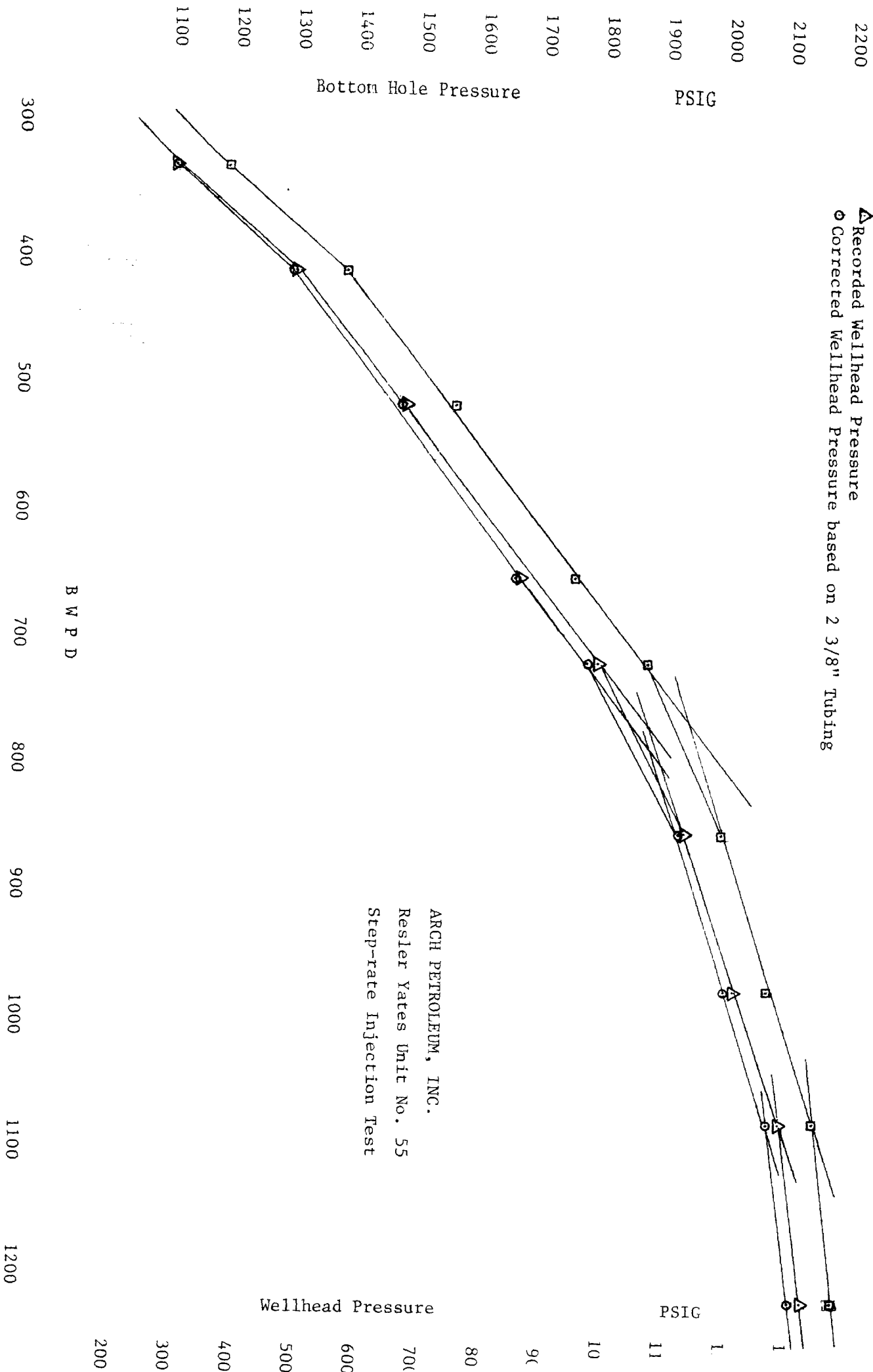


■ Bottom Hole Pressure @ 2,022 Feet
 ▲ Recorded Wellhead Pressure
 ○ Corrected Wellhead Pressure based on 2 3/8" Tubing



JOHN WEST ENGINEERING COMPANY

Step Rate Injection Test

Well Name Resler Yates Unit No. 55

Test Date November 9, 1990

Company Name Arch Petroleum, Inc.

RECEIVED

NOV 14 '90

Remarks	Time	Tbg. Press.	Rate B P D	Total	B H P	Tbg. Press.	Rate G P M	O. C. D. Total
				BOMB SET @ 2022'				
	10:05	12.10		0	885.90			
	10:10	238.80	403.20	1.4	1132.30			
	10:15	274.50	288.00	2.4	1159.10			
Rate I	10:20	289.50	288.00	3.4	1178.60	288.9	9.52	0.573
			326.40					
	10:25	436.30	432.00	4.9	1329.10			
	10:30	469.30	403.20	6.3	1353.80			
Rate II	10:35	487.00	374.40	7.6	1372.70	483.8	11.76	3.250
			403.20					
	10:40	626.30	518.40	9.4	1504.90			
	10:45	647.90	518.40	11.2	1525.90			
Rate III	10:50	669.60	489.60	12.9	1550.70	664.6	14.84	4.997
			508.80					
	10:55	819.00	662.40	15.2	1695.20			
	11:00	847.00	633.60	17.4	1729.50			
Rate IV	11:05	859.80	633.60	19.6	1750.10	852.1	18.78	7.710
			643.20					
	11:10	942.70	720.00	22.1	1825.10			
	11:15	960.50	720.00	24.6	1852.00			
Rate V	11:20	983.50	691.20	27.0	1868.80	974.2	20.72	9.266
			710.40					
	11:25	1067.90	864.00	30.0	1959.20			
	11:30	1090.70	835.20	32.9	1978.90			
Rate VI	11:35	1136.70	835.20	35.8	1994.50	1123.9	24.64	12.768
			844.80					
	11:40	1192.80	979.2	39.2	2056.20			
	11:45	1204.20	979.20	42.6	2060.00			
Rate VII	11:50	1216.90	950.40	45.9	2067.70	1200.4	28.28	16.475
			969.60					
	11:55	1273.20	1094.40	49.7	2125.90			
	12:00	1289.80	1065.60	53.4	2143.30			
Rate VIII	12:05	1296.20	1065.60	57.1	2147.00	1276.3	31.36	19.947
			1075.20					

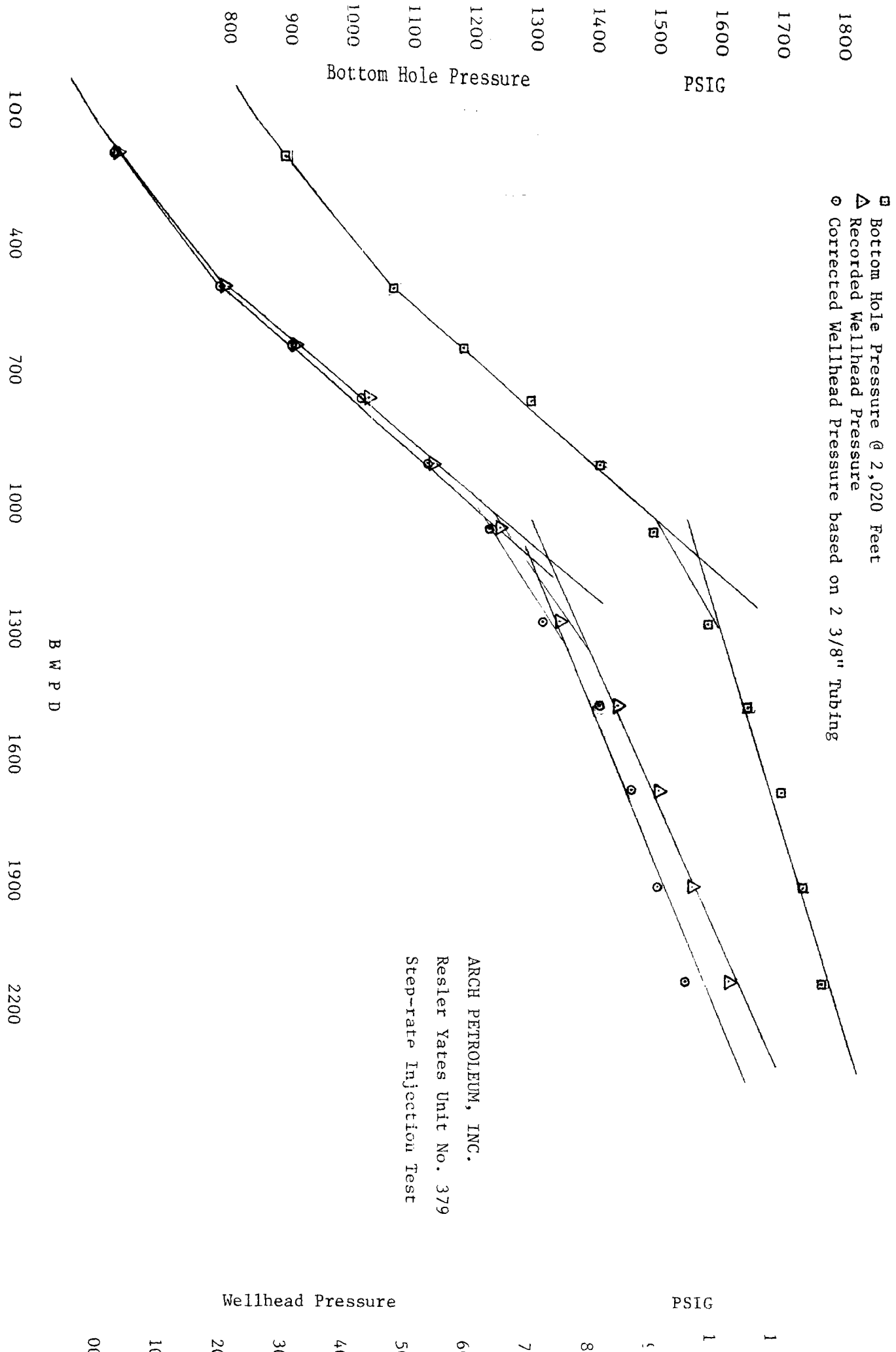
Step Rate Injection Test

Test Date November 9, 1990

Company Name Arch Petroleum, Inc.

NOV 14 '90

[illegible]



ARCH PETROLEUM, INC.
 Resler Yates Unit No. 379
 Step-rate Injection Test

Step Rate Injection Test

Well Name Resler Yates Unit No. 379

Test Date November 10, 1930

Company Name Arch Petroleum, Inc.

O. C. D.
ARTESIA, OFFICE

Remarks	Time	Tbg. Press.	Rate B P D	Total	B H P	Tbg. Press.	Rate G P M	Total
				BOMB SET @ 2020'				
	9:05	15.2		0				
	9:10	16.5	201.60	.7	890.80			
	9:15	16.4	144.00	1.2	891.20			
Rate I	9:20	16.3	172.80	1.8	890.60	15.6	5.04	0.677
			172.80					
	9:25	125.80	460.80	3.4	996.60			
	9:30	163.90	489.60	5.1	1035.50			
Rate II	9:35	190.50	489.60	6.8	1064.00	186.0	14.00	4.482
			479.99					
	9:40	261.90	604.80	8.9	1129.30			
	9:45	293.60	633.60	11.1	1161.20			
Rate III	9:50	311.30	604.80	13.2	1182.10	304.2	17.92	7.077
			614.40					
	9:55	368.60	720.00	15.7	1240.40			
	10:00	405.50	748.80	18.3	1271.90			
Rate IV	10:05	428.30	748.80	20.9	1297.30	418.3	21.56	9.963
			739.20					
	10:10	488.20	864.00	23.9	1350.80			
	10:15	526.50	892.80	27.0	1380.00			
Rate V	10:20	537.80	892.80	30.1	1404.80	524.0	25.76	13.849
			883.20					
	10:25	600.20	1036.80	33.7	1450.90			
	10:30	623.00	1065.60	37.4	1477.60			
Rate VI	10:35	643.30	1036.80	41.0	1498.10	624.3	30.52	18.951
			1046.40					
	10:40	703.10	1267.20	45.40	1542.30			
	10:45	720.80	1267.20	49.80	1566.40			
Rate VII	10:50	743.60	1267.20	54.2	1584.50	716.6	36.96	27.006
			1267.20					
	10:55	795.80	1468.80	59.3	1622.80			
	11:00	813.50	1440.00	64.3	1641.80			
Rate VIII	11:05	840.00	1468.80	69.4	1657.40	804.9	42.56	35.060
			1459.20					

Step Rate Injection Test

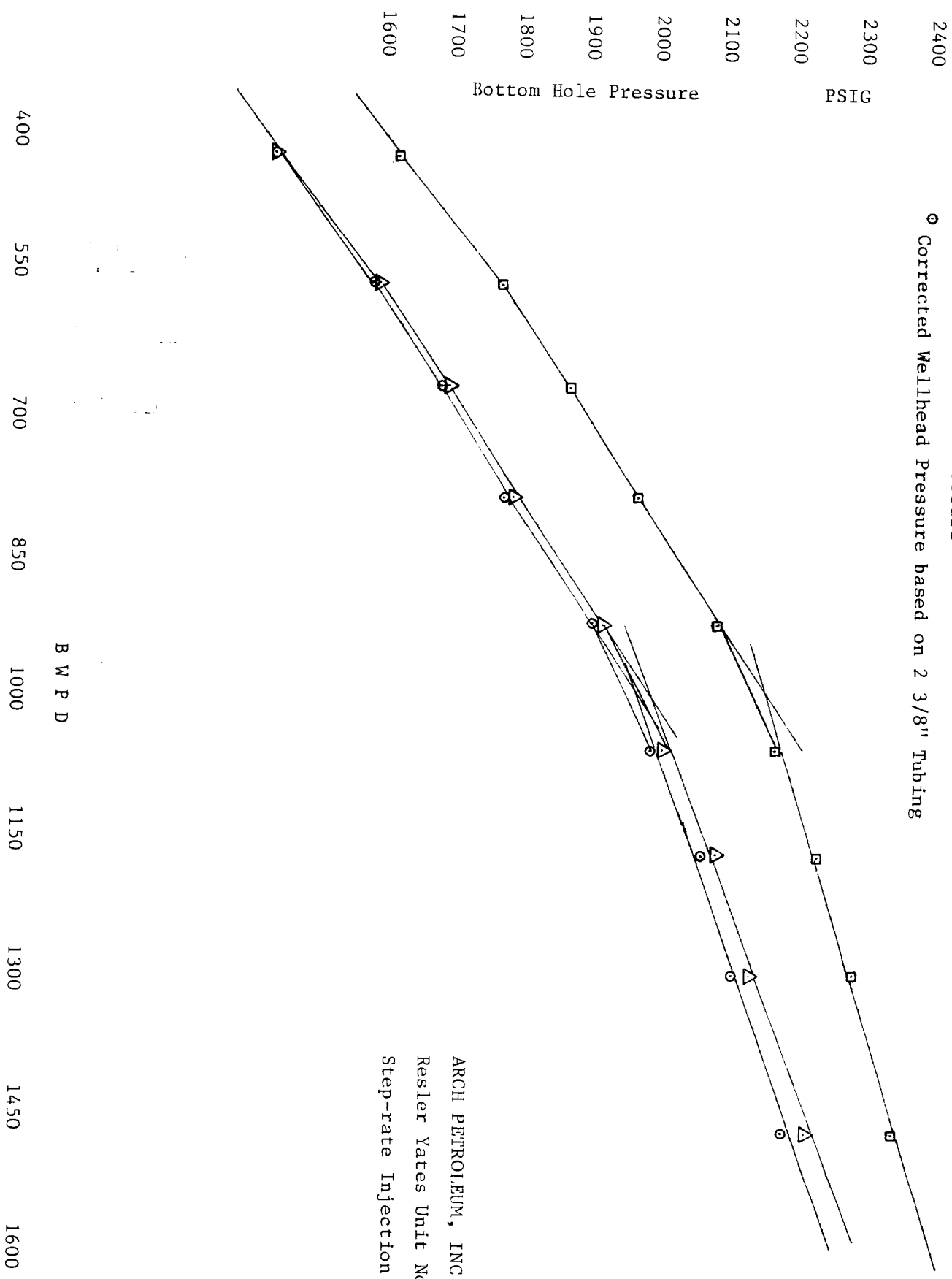
RECEIVED

NOV 14 '90

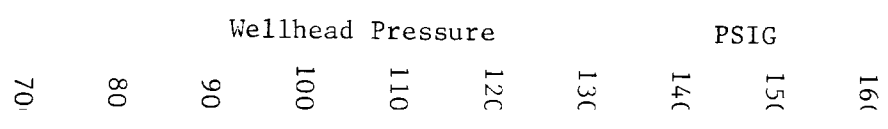
Page 2

[illegible]

■ Bottom Hole Pressure @ 2,041 Feet
 △ Recorded Wellhead Pressure
 ○ Corrected Wellhead Pressure based on 2 3/8" Tubing



ARCH PETROLEUM, INC.
 Resler Yates Unit No. 380
 Step-rate Injection Test



JOHN WEST ENGINEERING COMPANY

Step Rate Injection Test

Well Name Resler Yates Unit No. 380

Test Date November 9, 1990

Company Name Arch Petroleum, Inc.

RECEIVED

NOV 14 '90

Remarks	Time	Tbg. Press.	Rate B P D	Total	B H P	Tbg. Press.	Rate G RPS	O. C. D. Total
				BOMB SET @ 2041'				
	2:05	31.8		0	907.90			
	2:10	591.0	460.80	1.6	1473.90			
	2:15	649.80	403.20	3.0	1535.20			
Rate I	2:20	729.10	403.20	4.4	1610.30	725.5	12.32	3.575
			422.40					
	2:25	839.10	576.00	6.4	1720.60			
	2:30	866.10	547.20	8.3	1746.40			
Rate II	2:35	881.50	547.20	10.2	1762.50	875.5	16.24	5.960
			556.80					
	2:40	954.50	662.40	12.5	1831.10			
	2:45	969.90	691.20	14.9	1849.90			
Rate III	2:50	986.60	633.60	17.1	1862.60	978.4	19.32	8.218
			662.40					
	2:55	1069.80	777.60	19.8	1936.40			
	3:00	1080.10	777.60	22.5	1949.60			
Rate IV	3:05	1081.30	777.60	25.2	1965.50	1070.2	22.68	11.056
			777.60					
	3:10	1180.00	921.60	28.4	2046.80			
	3:15	1208.20	921.60	31.6	2069.30			
Rate V	3:20	1216.00	892.80	34.7	2084.70	1201.2	26.60	14.848
			912.00					
	3:25	1282.60	1065.60	38.4	2144.80			
	3:30	1295.50	1036.80	42.00	2157.80			
Rate VI	3:35	1307.10	1036.80	45.6	2168.50	1288.0	30.52	19.148
			1046.40					
	3:40	1370.00	1152.00	49.6	2224.00			
	3:45	1383.20	1180.80	53.7	2237.60			
Rate VII	3:50	1386.20	1152.00	57.7	2236.60	1363.0	33.88	23.230
			1161.60					
	3:55	1431.40	1296.00	62.20	2280.10			
	4:00	1447.20	1296.00	66.70	2284.00			
Rate VIII	4:05	1438.60	1267.20	71.10	2288.40	1410.5	37.52	28.057
			1286.40					

Step Rate Injection Test

Test Date November 9, 1990

Company Name Arch Petroleum, Inc.

NOV 14 '90

0.62

[illegible]

Attn. Dave Catasack

IN DIVISION
ED

'90 NOV 21 PM 9 25
this many

They have injected

BPD in these wells from

Nov 1 st to Nov 9

# 55	732.30
# 379	1198.13
# 380	955.44

Jary Williams

NEW MEXICO OIL CONSERVATION COMMISSION
FIELD TRIP REPORT

Name Johnny Robinson Date 6-5-90 Miles 60 District II
Time of Departure 8:00 am Time of Return 5:00 pm Car No. 10276

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature _____

CLASSIFICATION
FACILITY
HOURS
QUARTER
HOURS

O P 8

1 Well C-32-18-28 Arch Petroleum, Resler Yates State #61.
Ran a bond log on 8 1/4" casing and found poor cement at surface to 35 ft. and a few bridges at 330 ft and 410 ft. Talked with Mike Williams about squeezing 8 1/4". He decided to circulate 4 1/2" casing. Ran 1988 ft of 4 1/2" casing. Cemented with 300 Sxs of Halliburton Lite with 6# salt, 1/4 lb. per sx of flocele and .3% Halad 4 followed by 225 Sxs of 65-35 2% BOZ cement. Circulated 80 Sxs to pit.

A.O.R. Well
Division Order WFX-588

FILE WFX-588

<u>Mileage</u>	<u>Per Diem</u>	<u>Hours</u>
UIC _____	UIC _____	UIC _____
RFA _____	RFA _____	RFA _____
Other <u>60</u>	Other <u>0</u>	Other <u>8</u>

TYPE INSPECTION PERFORMED

INSPECTION CLASSIFICATION

NATURE OF SPECIFIC WELL OR FACILITY INSPECTED

H = Housekeeping
P = Plugging
C = Plugging Cleanup
T = Well Test
R = Repair/Workover
F = Waterflow
M = Mishap or Spill
W = Water Contamination
O = Other

U = Underground Injection Control - Any inspection of or related to injection project, facility, or well or resulting from injection into any well. (SWD, Indry injection and production wells, water flows or pressure tests, surface injection equipment, plugging, etc.)
R = Inspections relating to Reclamation Fund Activity
O = Other - Inspections not related to injection or The Reclamation Fund

D = Drilling
P = Production
I = Injection
C = Combined prod. inj. operations
S = SWD
U = Underground Storage
G = General Operation
F = Facility or location

NEW MEXICO OIL CONSERVATION COMMISSION
FIELD TRIP REPORT

INSPECTION

CLASSIFICATION

FACILITY

HOURS

QUARTER
HOURS

Name Johnny Robinson Date 6-18-90 Miles 190 District II
Time of Departure 7:30 am Time of Return 6:00 pm Car No. 10276

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature _____

R O P 10 2

1 Well B-32-18-28 Arch Petr Corp, Resler Yates St #55. Operator WIH with a 7 7/8" scraper to 2037 ft. Ran 2006 ft of 4 1/2" casing. Pumped 300 Sx Halliburton Lite with 1/4# Flocele, 6# salt and 2% Halad 4, followed by 225 Sx oc 65-35 Poz-Mix Prem, .3 Halad 4 and .2 CFR3. Pumped cement at 700 PSI squeezed off bradenhead valve slowly pumping at 1 BPM until pressure gained 250 PSI. Pumped approximately 1 1/2 bbls of cement with bradenhead closed.

AOR Well. Copy to David Catanach.

Mileage

UIC _____
RFA _____
Other 190

Per Diem

UIC _____
RFA _____
Other 0

Hours

UIC _____
RFA _____
Other 10 1/2

TYPE INSPECTION
PERFORMED

INSPECTION
CLASSIFICATION

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OR FACILITY INSPECTED

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E = Indicates some form of enforcement action taken in the field (show immediately below the letter U, R or O)

D = Drilling
P = Production
I = Injection
C = Combined prod. inj. operations
S = SWD
U = Underground Storage
G = General Operation
F = Facility or location
M = Meeting
O = Other

FIELD TRIP REPORT

Name Johnny Robinson Date 6-18-90 Miles 190 District II
 Time of Departure 7:30 am Time of Return 6:00 pm Car No. 10276

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature _____

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1 Well B-32-18-28 Arch Petr Corp, Resler Yates St #55. Operator WIH with a 7 7/8" scraper to 2037 ft. Ran 2006 ft of 4 1/2" casing. Pumped 300 Sx Halliburton Lite with 1/4# Flocele, 6# salt and 2% Halad 4, followed by 225 Sx oc 65-35 Poz-Mix Prem, .3 Halad 4 and .2 CFR3. Pumped cement at 700 PSI squeezed off bradenhead valve slowly pumping at 1 BPM until pressure gained 250 PSI. Pumped approximately 1 1/2 bbls of cement with bradenhead closed.

AOR Well. Copy to David Catanach.

Mileage

UIC _____

RFA _____

Other 190

Per Diem

UIC _____

RFA _____

Other 0

Hours

UIC _____

RFA _____

Other 10 1/2

TYPE INSPECTION
PERFORMED

INSPECTION
CLASSIFICATION

NATURE OF SPECIFIC WELL
OR FACILITY INSPECTED

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G = General Operation
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NEW MEXICO OIL CONSERVATION COMMISSION
FIELD TRIP REPORT

I N S P E C T I O N	C L A S S I F I C A T I O N	F A C I L I T Y	H O U R S	Q U A R T E R
				H O U R S

Name Johnny Robinson Date 6-5-90 Miles 60 District II
Time of Departure 8:00 am Time of Return 5:00 pm Car No. 10276

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature _____

1 Well C-32-18-28 Arch Petroleum, Resler Yates State #61.
Ran a bond log on 8 1/4" casing and found poor cement at surface to 35 ft. and a few bridges at 330 ft and 410 ft. Talked with Mike Williams about squeezing 8 1/4". He decided to circulate 4 1/2" casing. Ran 1988 ft of 4 1/2" casing. Cemented with 300 Sxs of Halliburton Lite with 6# salt, 1/4 lb. per sx of flocele and .3% Halad 4 followed by 225 Sxs of 65-35 2% BOZ cement. Circulated 80 Sxs to pit.

A.O.R. Well
Division Order WFX-588

FILE - WFX-588

<u>Mileage</u>	<u>Per Diem</u>	<u>Hours</u>
UIC _____	UIC _____	UIC _____
RFA _____	RFA _____	RFA _____
Other <u>60</u>	Other <u>0</u>	Other <u>8</u>

TYPE INSPECTION
PERFORMED

INSPECTION
CLASSIFICATION

NATURE OF SPECIFIC WELL
OR FACILITY INSPECTED

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P = Production
I = Injection
C = Combined prod. inj. operations
S = SKD
U = Underground Storage
G = General Operation
F = Facility or location
M = Meeting

FIELD	OPERATOR	DATE
LEASE	WELL No	LOCATION
Resler Yates St.	61	C-32-18-28
Arch Detr		12-11-89

A.O.R.

190-200
water

10 " casing set at 310 ' with _____ sx of _____ cement
Hole size _____ "

8 1/4 " casing set at 515 ' with _____ sx of _____ cement
Hole size _____ "

Bent log showed braden head squeeze
on 8 1/4 csg.

1988' 4 1/2 " casing set at 1988 ' with 300 + 225 Boz sx of Lite cement
Total Depth _____ ' Hole size _____ "