

John O. Farmer
Rugan 8

4-21s-11w

ORIGINAL

DST REPORT

GENERAL INFORMATION

API#15-185-22998

DATE	: 7-7-95	TICKET	: 22133
CUSTOMER	: JOHN O. FARMER, INC.	LEASE	: RUGAN
WELL	: #8	TEST	: 1
ELEVATION	: 1785 KB	GEOLOGIST	: FARMER
SECTION	: 4	FORMATION	: LANSING "E&F"
RANGE	: 11W	TOWNSHIP	: 21S
COUNTY	: STAFFORD	STATE	: KS
GAUGE SN#	: 11018	RANGE	: 4425
		CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3156.00 ft TO: 3183.00 ft TVD: 3183.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3159.0 ft 3180.0 ft
TEMPERATURE: 103.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	3136.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	27.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	3151.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3056.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. :	DUKE DRILLING #2	VISCOSITY :	46.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	13.600 cc
WEIGHT :	8.900 ppg	SERIAL NUMBER:	
CHLORIDES :	4000 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD-STRONG BLOW-BOTTOM OF BUCKET
IN 5 MINUTES. NO BLOWBACK.
FINAL FLOW PERIOD-STRONG BLOW-BOTTOM OF BUCKET

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

IMMEDIATELY.

FLUID RECOVERY

Feet of Fluid	%	%	%	%	Comments
	Oil	Gas	Water	Mud	
0.0	0.0	0.0	0.0	0.0	1000FT GAS ABOVE FLUID
30.0	10.0	10.0	0.0	80.0	OIL & GAS CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0421	STB	TOTAL FLOW TIME:	90.0000	min.
GAS VOLUME:	0.2363	SCF	AVERAGE OIL RATE:	6.0594	STB/D
MUD VOLUME:	0.3366	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.3787	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1493.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	10.00	10.00
INITIAL SHUT-IN	45.00		293.00
FINAL FLOW	45.00	18.00	18.00
FINAL SHUT-IN	60.00		344.00

FINAL HYDROSTATIC PRESSURE: 1468.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1526.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	50.00	38.00
INITIAL SHUT-IN	42.00		315.00
FINAL FLOW	45.00	55.00	38.00
FINAL SHUT-IN	57.00		370.00

FINAL HYDROSTATIC PRESSURE: 1482.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 7-7-95	TICKET : 22133
CUSTOMER : JOHN O. FARMER, INC.	LEASE : RUGAN
WELL : #8 TEST: 1	GEOLOGIST: FARMER
ELEVATION: 1785 KB	FORMATION: LANSING "E&F"
SECTION : 4	TOWNSHIP : 21S
RANGE : 11W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	50.00	50.00
5.00	50.00	0.00
10.00	44.00	-6.00
15.00	40.00	-4.00
20.00	39.00	-1.00
25.00	38.00	-1.00
30.00	38.00	0.00
35.00	38.00	0.00
40.00	38.00	0.00
45.00	38.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	47.00	47.00	16.00
6.00	69.00	22.00	8.50
9.00	98.00	29.00	6.00
12.00	128.00	30.00	4.75
15.00	153.00	25.00	4.00
18.00	181.00	28.00	3.50
21.00	202.00	21.00	3.14
24.00	224.00	22.00	2.88
27.00	241.00	17.00	2.67
30.00	259.00	18.00	2.50
33.00	278.00	19.00	2.36
36.00	290.00	12.00	2.25
39.00	304.00	14.00	2.15
42.00	315.00	11.00	2.07

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

Time (min)	Pressure	Delta P
0.00	55.00	55.00
5.00	55.00	0.00
10.00	46.00	-9.00
15.00	41.00	-5.00
20.00	40.00	-1.00
25.00	40.00	0.00
30.00	40.00	0.00
35.00	39.00	-1.00
40.00	39.00	0.00
45.00	38.00	-1.00

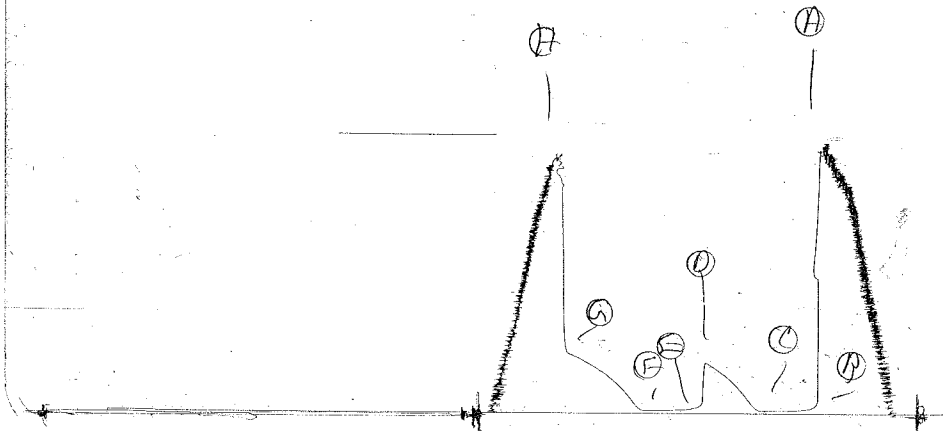
FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	57.00	57.00	16.00
6.00	82.00	25.00	8.50
9.00	106.00	24.00	6.00
12.00	137.00	31.00	4.75
15.00	163.00	26.00	4.00
18.00	190.00	27.00	3.50
21.00	210.00	20.00	3.14
24.00	228.00	18.00	2.88
27.00	246.00	18.00	2.67
30.00	262.00	16.00	2.50
33.00	279.00	17.00	2.36
36.00	291.00	12.00	2.25
39.00	307.00	16.00	2.15
42.00	319.00	12.00	2.07
45.00	333.00	14.00	2.00
48.00	344.00	11.00	1.94
51.00	353.00	9.00	1.88
54.00	361.00	8.00	1.83
57.00	370.00	9.00	1.79

DST #1
RSC #11018
INSIDE

DKT 22133

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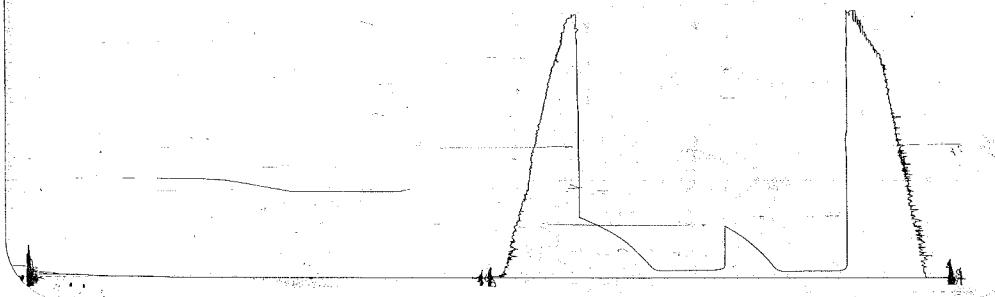


Inside Recorder

DST #1
RSC #13629
OUTSIDE

DKT 22133

0



ORIGINAL

DST REPORT

GENERAL INFORMATION

DATE : 7-7-95
CUSTOMER : JOHN O. FARMER, INC.
WELL : #8 TEST: 2
ELEVATION: 1785 KB
SECTION : 4
RANGE : 11W COUNTY: STAFFORD
GAUGE SN#: 11018 RANGE : 4425
TICKET : 22134
LEASE : RUGAN
GEOLOGIST: FARMER
FORMATION: ARBUCKLE
TOWNSHIP : 21S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3345.00 ft TO: 3375.00 ft TVD: 3375.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3348.0 ft 3372.0 ft
TEMPERATURE: 106.0

DRILL COLLAR LENGTH: 0.0 ft I.D.: 0.000 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 3325.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 20.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 30.0 ft ANCHOR SIZE: 5.500 in
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in
MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5XH
PACKER DEPTH: 3340.0 ft SIZE: 6.630 in
PACKER DEPTH: 3345.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : DUKE DRILLING #2
MUD TYPE : CHEMICAL
WEIGHT : 9.000 ppg
CHLORIDES : 5000 ppm
JARS-MAKE :
DID WELL FLOW?: NO
VISCOSITY : 46.00 cp
WATER LOSS: 12.400 cc
SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD-STRONG BLOW-BOTTOM OF BUCKET
IN 6 MINUTES. NO BLOWBACK.
FINAL FLOW PERIOD-STRONG BLOW-BOTTOM OF BUCKET

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

IMMEDIATELY.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	1500FT GAS ABOVE FLUID
70.0	25.0	5.0	0.0	70.0	OIL & GAS CUT MUD

RATE INFORMATION

OIL VOLUME:	0.2455	STB	TOTAL FLOW TIME:	90.0000	min.
GAS VOLUME:	0.2757	SCF	AVERAGE OIL RATE:	14.9240	STB/D
MUD VOLUME:	0.6873	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.9328	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1636.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	44.00	48.00
INITIAL SHUT-IN	45.00		644.00
FINAL FLOW	45.00	57.00	64.00
FINAL SHUT-IN	60.00		578.00

FINAL HYDROSTATIC PRESSURE: 1604.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1634.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	72.00	54.00
INITIAL SHUT-IN	42.00		654.00
FINAL FLOW	45.00	78.00	66.00
FINAL SHUT-IN	60.00		580.00
FINAL HYDROSTATIC PRESSURE:	1616.00		

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE	: 7-7-95	TICKET	: 22134
CUSTOMER	: JOHN O. FARMER, INC.	LEASE	: RUGAN
WELL	: #8	TEST:	2
ELEVATION:	1785 KB	GEOLOGIST:	FARMER
SECTION	: 4	FORMATION:	ARBUCKLE
RANGE	: 11W	COUNTY:	STAFFORD
GAUGE SN#:	11018	RANGE	: 4425
		STATE	: KS
		CLOCK	: 12

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	72.00	72.00
5.00	53.00	-19.00
10.00	53.00	0.00
15.00	53.00	0.00
20.00	53.00	0.00
25.00	54.00	1.00
30.00	54.00	0.00
35.00	54.00	0.00
40.00	54.00	0.00
45.00	54.00	0.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	63.00	63.00	16.00
6.00	70.00	7.00	8.50
9.00	79.00	9.00	6.00
12.00	94.00	15.00	4.75
15.00	118.00	24.00	4.00
18.00	129.00	11.00	3.50
21.00	148.00	19.00	3.14
24.00	191.00	43.00	2.88
27.00	276.00	85.00	2.67
30.00	382.00	106.00	2.50
33.00	478.00	96.00	2.36
36.00	571.00	93.00	2.25
39.00	616.00	45.00	2.15
42.00	654.00	38.00	2.07

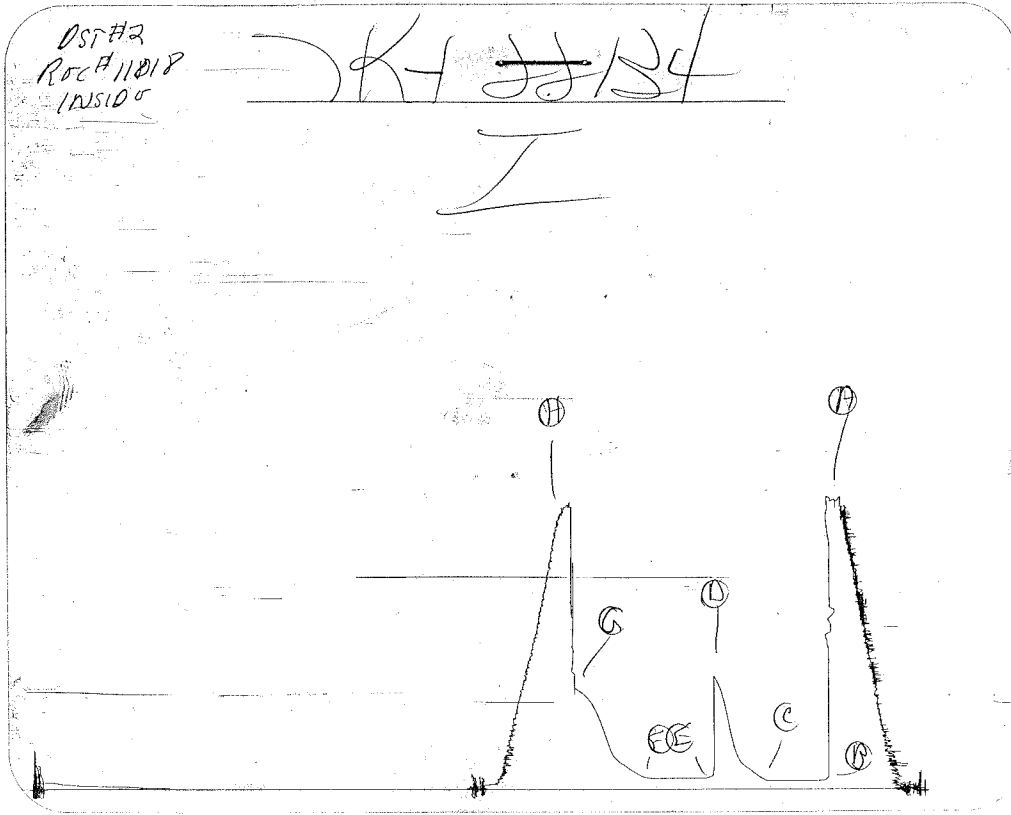
PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

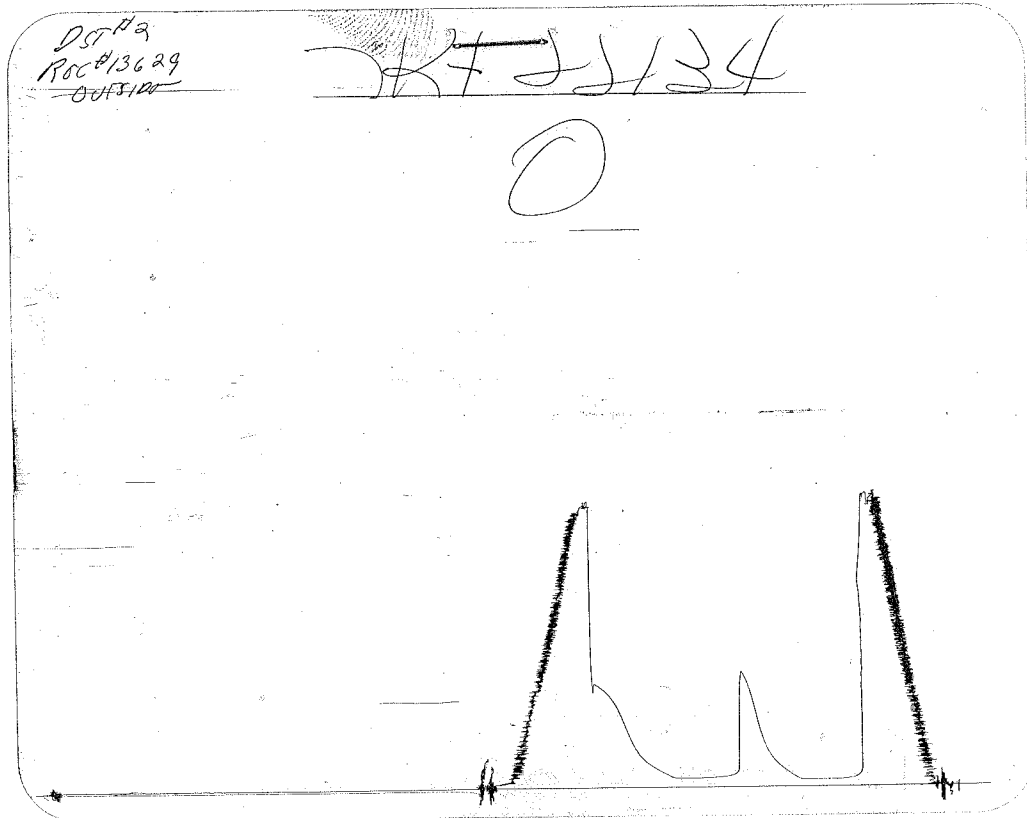
Time (min)	Pressure	Delta P
0.00	78.00	78.00
5.00	64.00	-14.00
10.00	64.00	0.00
15.00	64.00	0.00
20.00	64.00	0.00
25.00	65.00	1.00
30.00	65.00	0.00
35.00	65.00	0.00
40.00	66.00	1.00
45.00	66.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	72.00	72.00	16.00
6.00	82.00	10.00	8.50
9.00	89.00	7.00	6.00
12.00	97.00	8.00	4.75
15.00	115.00	18.00	4.00
18.00	126.00	11.00	3.50
21.00	134.00	8.00	3.14
24.00	144.00	10.00	2.88
27.00	153.00	9.00	2.67
30.00	168.00	15.00	2.50
33.00	216.00	48.00	2.36
36.00	278.00	62.00	2.25
39.00	360.00	82.00	2.15
42.00	416.00	56.00	2.07
45.00	482.00	66.00	2.00
48.00	511.00	29.00	1.94
51.00	536.00	25.00	1.88
54.00	557.00	21.00	1.83
57.00	568.00	11.00	1.79
60.00	580.00	12.00	1.75



Inside Recorder



Outside Recorder

ORIGINAL

DST REPORT

GENERAL INFORMATION

DATE	: 7-8-95	TICKET	: 22135
CUSTOMER	: JOHN O. FARMER, INC.	LEASE	: RUGAN
WELL	: #8	TEST: 3	GEOLOGIST: FARMER
ELEVATION	: 1785 KB	FORMATION	: ARBUCKLE
SECTION	: 4	TOWNSHIP	: 21S
RANGE	: 11W	COUNTY: STAFFORD	STATE : KS
GAUGE SN#	: 11018	RANGE : 4425	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3375.00 ft	TO:	3385.00 ft	TVD:	3385.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	OIL
DEPTH OF RECORDERS:	3378.0 ft		3382.0 ft		
TEMPERATURE:	106.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:		0.000 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3355.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	10.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	3370.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3375.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	DUKE DRILLING #2	VISCOSITY :	46.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	12.000 cc
WEIGHT :	9.200 ppg	SERIAL NUMBER:	
CHLORIDES :	6000 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD-STRONG BLOW-BOTTOM OF BUCKET
IN 4 MINUTES. NO BLOWBACK.
FINAL FLOW PERIOD-STRONG BLOW-BOTTOM OF BUCKET

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

IMMEDIATELY. NO BLOWBACK.

FLUID RECOVERY

Feet of Fluid	%	%	%	%	Comments
Oil	Gas	Water	Mud		
0.0	0.0	0.0	0.0	0.0	1200FT GAS ABOVE FLUID
5.0	100.0	0.0	0.0	0.0	CLEAN GASSY OIL
0.0	0.0	0.0	0.0	0.0	40 GRAVITY AT 60 DEGREES
30.0	60.0	10.0	0.0	30.0	GASSY MUDDY OIL

RATE INFORMATION

OIL VOLUME:	0.3226	STB	TOTAL FLOW TIME:	90.0000	min.
GAS VOLUME:	0.2363	SCF	AVERAGE OIL RATE:	7.1815	STB/D
MUD VOLUME:	0.1262	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.4488	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1630.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	24.00	24.00
INITIAL SHUT-IN	45.00		154.00
FINAL FLOW	45.00	32.00	34.00
FINAL SHUT-IN	60.00		150.00

FINAL HYDROSTATIC PRESSURE: 1602.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1685.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	66.00	41.00
INITIAL SHUT-IN	45.00		167.00
FINAL FLOW	45.00	64.00	47.00
FINAL SHUT-IN	63.00		157.00

FINAL HYDROSTATIC PRESSURE: 1640.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 7-8-95	TICKET : 22135
CUSTOMER : JOHN O. FARMER, INC.	LEASE : RUGAN
WELL : #8 TEST: 3	GEOLOGIST: FARMER
ELEVATION: 1785 KB	FORMATION: ARBUCKLE
SECTION : 4	TOWNSHIP : 21S
RANGE : 11W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	66.00	66.00
5.00	43.00	-23.00
10.00	41.00	-2.00
15.00	41.00	0.00
20.00	41.00	0.00
25.00	41.00	0.00
30.00	41.00	0.00
35.00	41.00	0.00
40.00	41.00	0.00
45.00	41.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	42.00	42.00	16.00
6.00	45.00	3.00	8.50
9.00	49.00	4.00	6.00
12.00	56.00	7.00	4.75
15.00	63.00	7.00	4.00
18.00	77.00	14.00	3.50
21.00	84.00	7.00	3.14
24.00	92.00	8.00	2.88
27.00	104.00	12.00	2.67
30.00	113.00	9.00	2.50
33.00	126.00	13.00	2.36
36.00	137.00	11.00	2.25
39.00	148.00	11.00	2.15
42.00	157.00	9.00	2.07
45.00	167.00	10.00	2.00

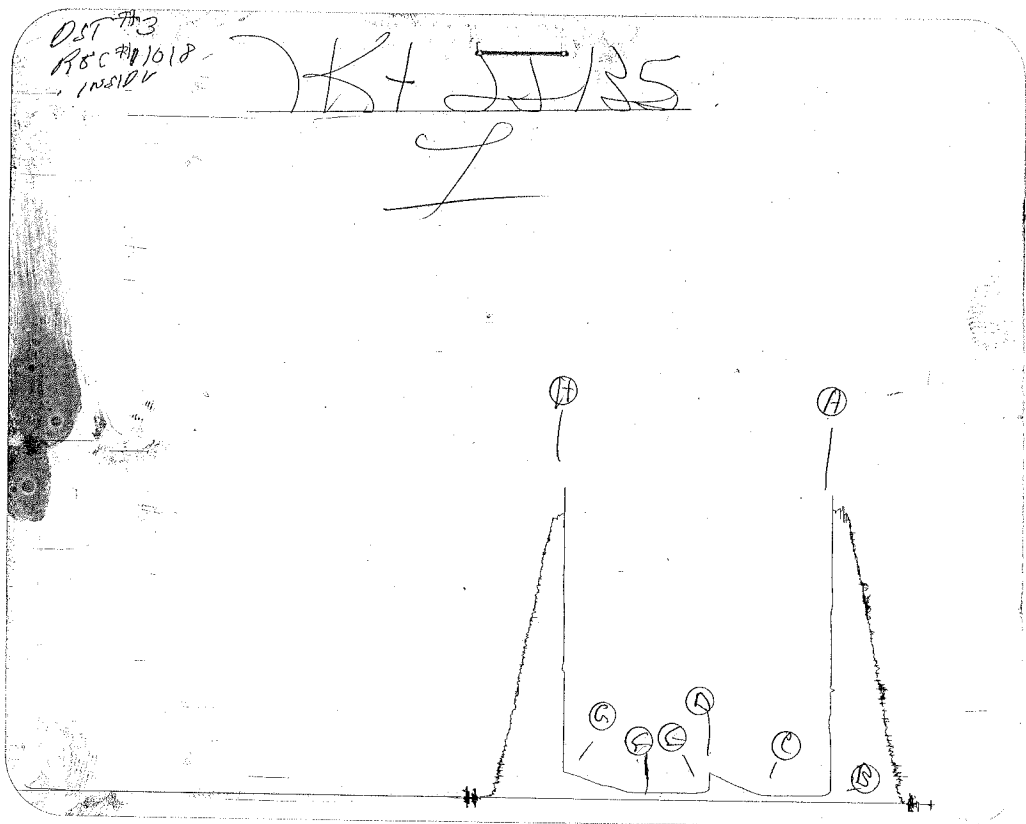
PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

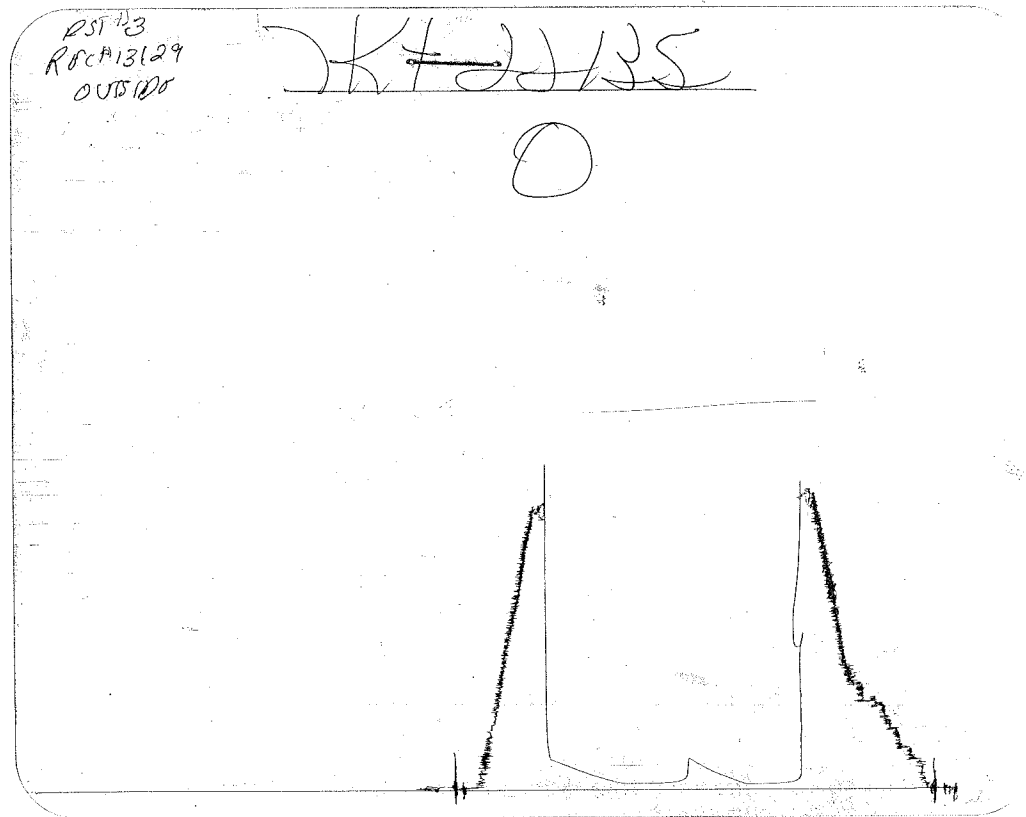
Time (min)	Pressure	Delta P
0.00	64.00	64.00
5.00	51.00	-13.00
10.00	47.00	-4.00
15.00	47.00	0.00
20.00	47.00	0.00
25.00	47.00	0.00
30.00	47.00	0.00
35.00	47.00	0.00
40.00	47.00	0.00
45.00	47.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	47.00	47.00	16.00
6.00	47.00	0.00	8.50
9.00	47.00	0.00	6.00
12.00	47.00	0.00	4.75
15.00	47.00	0.00	4.00
18.00	56.00	9.00	3.50
21.00	63.00	7.00	3.14
24.00	72.00	9.00	2.88
27.00	78.00	6.00	2.67
30.00	80.00	2.00	2.50
33.00	84.00	4.00	2.36
36.00	91.00	7.00	2.25
39.00	100.00	9.00	2.15
42.00	109.00	9.00	2.07
45.00	116.00	7.00	2.00
48.00	124.00	8.00	1.94
51.00	132.00	8.00	1.88
54.00	140.00	8.00	1.83
57.00	146.00	6.00	1.79
60.00	150.00	4.00	1.75
63.00	157.00	7.00	1.71



Inside Recorder



ORIGINAL

DST REPORT

GENERAL INFORMATION

DATE : 7-8-95
CUSTOMER : JOHN O. FARMER, INC.
WELL : #8 TEST: 4
ELEVATION: 1785 KB
SECTION : 4
RANGE : 11W COUNTY: STAFFORD
GAUGE SN#: 11018 RANGE : 4425
TICKET : 22136
LEASE : RUGAN
GEOLOGIST: FARMER
FORMATION: ARBUCKLE
TOWNSHIP : 21S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3386.00 ft TO: 3396.00 ft TVD: 3396.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3389.0 ft 3393.0 ft
TEMPERATURE: 108.0

DRILL COLLAR LENGTH: 0.0 ft I.D.: 0.000 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 3366.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 20.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 10.0 ft ANCHOR SIZE: 5.500 in
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in
MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5XH
PACKER DEPTH: 3381.0 ft SIZE: 6.630 in
PACKER DEPTH: 3386.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : DUKE DRILLING #2
MUD TYPE : CHEMICAL
WEIGHT : 9.200 ppg
CHLORIDES : 6000 ppm
JARS-MAKE :
DID WELL FLOW?: NO
VISCOSITY : 46.00 cp
WATER LOSS: 12.000 cc
SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD-STRONG BLOW-BOTTOM OF BUCKET
IN 12 MINUTES. NO BLOWBACK.
FINAL FLOW PERIOD-STRONG BLOW-BOTTOM OF BUCKET

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

IMMEDIATELY. NO BLOWBACK.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	1080FT GAS ABOVE FLUID
2.0	100.0	0.0	0.0	0.0	FREE OIL
0.0	0.0	0.0	0.0	0.0	40 GRAVITY AT 60 DEGREES
30.0	30.0	20.0	0.0	50.0	OIL & GAS CUT MUD

RATE INFORMATION

OIL VOLUME:	0.1543 STB	TOTAL FLOW TIME:	90.0000 min.
GAS VOLUME:	0.4725 SCF	AVERAGE OIL RATE:	5.8350 STB/D
MUD VOLUME:	0.2104 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.3647 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1640.00

Description	Duration	p1	p End
INITIAL FLOW	45.00	22.00	24.00
INITIAL SHUT-IN	45.00		440.00
FINAL FLOW	45.00	30.00	34.00
FINAL SHUT-IN	60.00		745.00

FINAL HYDROSTATIC PRESSURE: 1610.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1718.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	45.00	90.00	44.00
INITIAL SHUT-IN	45.00		453.00
FINAL FLOW	45.00	75.00	49.00
FINAL SHUT-IN	63.00		756.00

FINAL HYDROSTATIC PRESSURE: 1660.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 7-8-95	TICKET : 22136
CUSTOMER : JOHN O. FARMER, INC.	LEASE : RUGAN
WELL : #8 TEST: 4	GEOLOGIST: FARMER
ELEVATION: 1785 KB	FORMATION: ARBUCKLE
SECTION : 4	TOWNSHIP : 21S
RANGE : 11W COUNTY: STAFFORD	STATE : KS
GAUGE SN#: 11018 RANGE : 4425	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	90.00	90.00
5.00	57.00	-33.00
10.00	48.00	-9.00
15.00	47.00	-1.00
20.00	46.00	-1.00
25.00	45.00	-1.00
30.00	44.00	-1.00
35.00	44.00	0.00
40.00	44.00	0.00
45.00	44.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	44.00	44.00	16.00
6.00	49.00	5.00	8.50
9.00	56.00	7.00	6.00
12.00	62.00	6.00	4.75
15.00	67.00	5.00	4.00
18.00	75.00	8.00	3.50
21.00	82.00	7.00	3.14
24.00	95.00	13.00	2.88
27.00	108.00	13.00	2.67
30.00	140.00	32.00	2.50
33.00	177.00	37.00	2.36
36.00	238.00	61.00	2.25
39.00	331.00	93.00	2.15
42.00	417.00	86.00	2.07
45.00	453.00	36.00	2.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

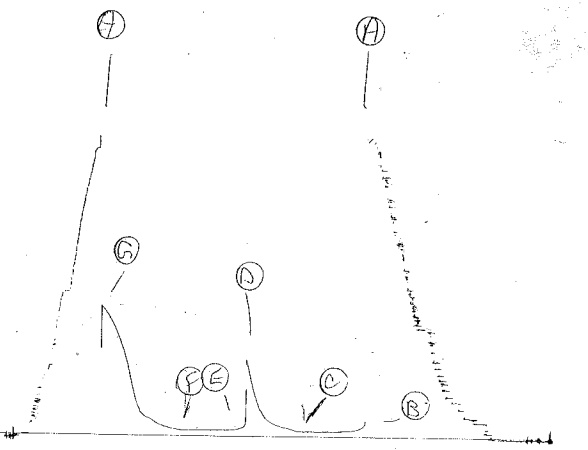
Time (min)	Pressure	Delta P
0.00	75.00	75.00
5.00	59.00	-16.00
10.00	50.00	-9.00
15.00	50.00	0.00
20.00	50.00	0.00
25.00	49.00	-1.00
30.00	49.00	0.00
35.00	49.00	0.00
40.00	49.00	0.00
45.00	49.00	0.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	49.00	49.00	16.00
6.00	53.00	4.00	8.50
9.00	56.00	3.00	6.00
12.00	61.00	5.00	4.75
15.00	69.00	8.00	4.00
18.00	77.00	8.00	3.50
21.00	89.00	12.00	3.14
24.00	103.00	14.00	2.88
27.00	116.00	13.00	2.67
30.00	129.00	13.00	2.50
33.00	155.00	26.00	2.36
36.00	216.00	61.00	2.25
39.00	306.00	90.00	2.15
42.00	416.00	110.00	2.07
45.00	492.00	76.00	2.00
48.00	557.00	65.00	1.94
51.00	622.00	65.00	1.88
54.00	666.00	44.00	1.83
57.00	703.00	37.00	1.79
60.00	736.00	33.00	1.75
63.00	756.00	20.00	1.71

DST # 4
RSC # 11018
INSIDE

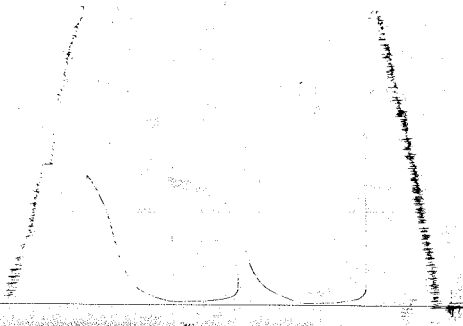
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Inside Recorder

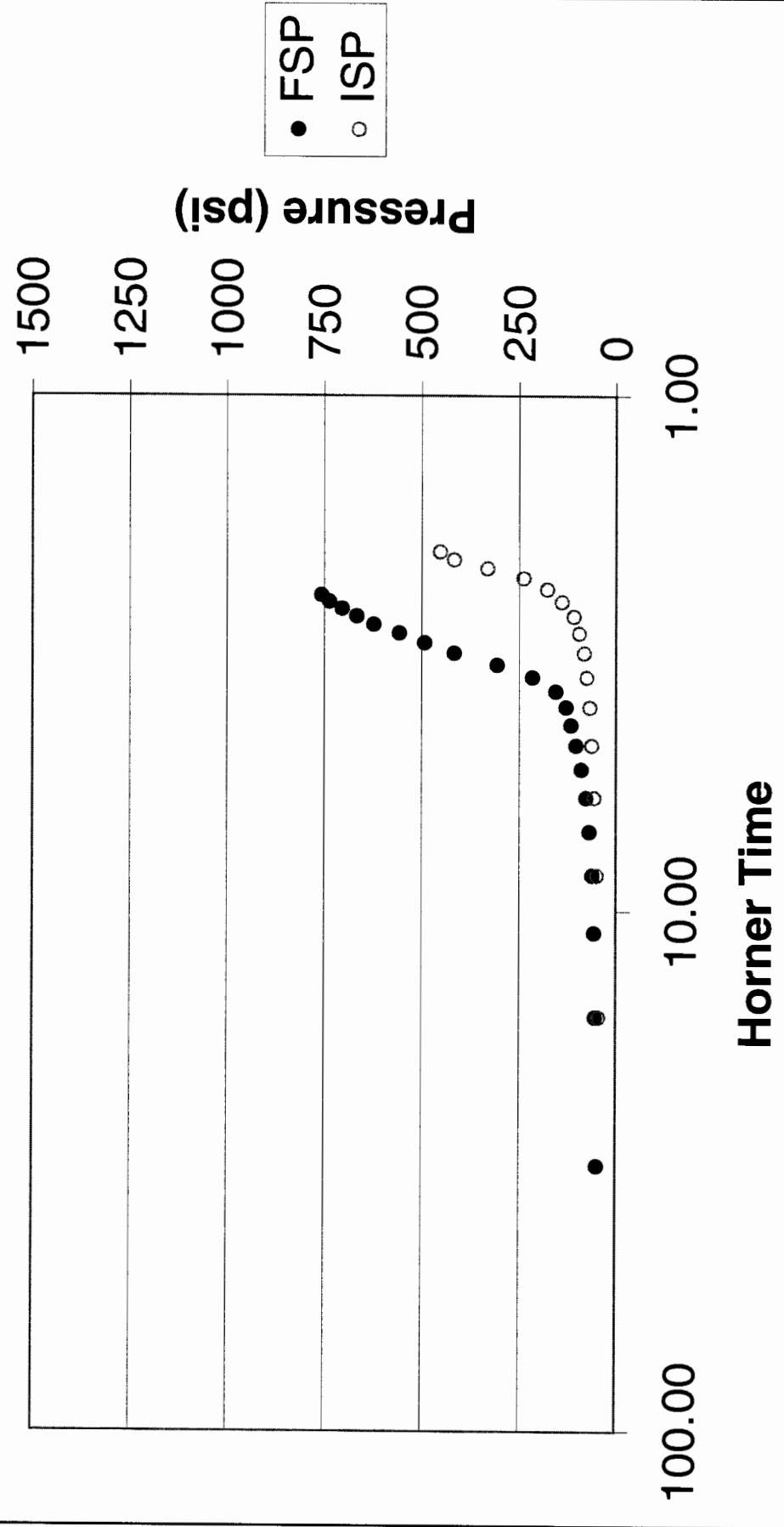
DST # 4
RSC # 13629
OUTSIDE

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Linear plot not visible.

4-21S-11W, Arbuckle, 15-185-22998, DST #4, 3386-96, 2' FO, 30' O&GCM



Chase-Silica Arbuckle Pressure

