

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

C/SF

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL ☐	CAS WELL ☐	DRY ☒	Other _____		
b. TYPE OF COMPLETION:		NEW WELL ☒	WORK OVER ☐	DEEP EN ☐	PLUG BACK ☐	DIFF. REVR. ☐	Other _____
2. NAME OF OPERATOR Thornton Operating Corporation						5. LEASE DESIGNATION AND SERIAL NO. NM-57255	
3. ADDRESS AND TELEPHONE NO. P. O. Box 833, Midland, TX 79702 (915) 684-4275						6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2428 feet FSL, 1154 feet FEL At top prod. interval reported below At total depth						7. UNIT AGREEMENT NAME	
14. PERMIT NO. O. C. D. ARTESA OFFICE						8. FARM OR LEASE NAME, WELL NO. Seagull Fed #1	
15. DATE SPUDDED 3/23/94						9. API WELL NO. 30-005-63007	
16. DATE T.D. REACHED 4/22/94						10. FIELD AND POOL, OR WILDCAT Wildcat Duran	
17. DATE COMPL. (Ready to prod.) 4/24/94						11. SEC. T., R., M., OR BLOCK AND SURVEY OR AREA 6 - T 13S - R 29E	
18. ELEVATIONS (OF, RKB, RT, GR, ETC.)* RKB 3690'						12. COUNTY OR PARISH Chaves	
19. ELEV. CASINGHEAD 3674						13. STATE NM	
20. TOTAL DEPTH, MD & TVD 9250						23. INTERVALS DRILLED BY 0-9250	
21. PLUG, BACK T.D., MD & TVD Surface						24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* NONE	
22. IF MULTIPLE COMPL., HOW MANY* N/A						25. WAS DIRECTIONAL SURVEY MADE YES	
26. TYPE ELECTRIC AND OTHER LOGS RUN Dual Latero Log, Micro SFL, Lithodensity, compensated Neutron, Long spaced sonic, Azimuthal resistivity Imager, Formation						27. WAS WELL CORED NO	
28. CASING RECORD (Report all strings set in well) Micro Imager							
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD		AMOUNT PULLED	
13-3/8 H-40	54.5#	330'	17 1/2"	Circ 370sx Halliburton "C"		None	
8-5/8 J-55	24#	2092'	12 1/4"	Circ 750sx Hall/lite/200SX "C" w 2% CaCl		None	
29. LINER RECORD							
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	30. TUBING RECORD		
					SIZE	DEPTH SET (MD)	PACKER SET (MD)
31. PERFORATION RECORD (Interval, size and number)							
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.							
DEPTH INTERVAL (MD)				AMOUNT AND KIND OF MATERIAL USED			
33.* PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in) P & A	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
FLOW. TUBING PRBS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)						TEST WITNESSED BY	
35. LIST OF ATTACHMENTS Drill Stem Tests #1, #2, #3, #4, #5							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED <i>Robert L. Thornton</i>		TITLE President			DATE 5/10/94		

*(See Instructions and Spaces for Additional Data on Reverse Side)

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Devonian	9163	9250	predominately white, very fine to fine crystalline, occasional rhombic crystalline intergranular porosity, trace brown oil stain, contain oil at top, water at bottom. Water contact unknown.	Yates	710'	
				7-Rivers	834'	
				Queen	1,401'	
				San Andres	1,961	
				Glorieta	3,362'	
				Tubb	4,800'	
				Abo	5,592'	
				Base Abo	6,027'	
				Wolfcamp	6,625'	
				Strawn	7,480'	
				Atoka	7,620'	
				Chester	8,478'	
				Mississippian	8,574'	
				Woodford	9,140'	
				Siluro-Devonian	9,163'	
				T.D.	9,250	

38. GEOLOGIC MARKERS

USI #1 (Monroe)

TEST DATE:
12-APR-1994

S T A R

Schlumberger Testing Data Report

Pressure Data Report

Schlumberger

COMPANY: Thornton Operating Company

WELL: Seagull Midcon Federal #1

TEST IDENTIFICATION

Test Type	Open Hole DST
Test No.	One
Formation	Morrow
Test Interval (ft)	8276 to 8332
Depth Reference	GL

WELL LOCATION

Field	Wildcat
County	Chaves
State	New Mexico
Sec/Twn/Rng	S6-13S-29E
Elevation (ft)	3674

HOLE CONDITIONS

Total Depth (MD/TVD) (ft)	8332
Hole Size (in)	7.875
Casing/Liner I.D. (in)	8.625
Perf'd Interval/Net Pay (ft) ..	/ 56
Shot Density/Diameter (in) ...	

MUD PROPERTIES

Mud Type	SaltGel/Starch/
Mud Weight (lb/gal)	9.4
Mud Resistivity (ohm.m)	.083 @ 70F
Filtrate Resistivity (ohm.m) ..	
Filtrate Chlorides (ppm)	93000

INITIAL TEST CONDITIONS	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

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INITIAL TEST CONDITIONS
Initial Hydrostatic (psi) .... 4290.61
Gas Cushion Type .....
Surface Pressure (psi) .....
Liquid Cushion Type .....
Cushion Length (ft) .....

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[illegible]

Pipe Length (ft)/I.D. (in) ...	7421 / 3.826
Collar Length (ft)/I.D. (in) ..	797 / 2.25
Packer Depths (ft)	8270,8276,
Bottomhole Choke Size (in) ...	.50
Gauge Depth (ft)/Type	8247/SB-20319

NET PIPE RECOVERY

Volume	Fluid Type	Properties
90 ft	Drilg. Mud	Rw.083070F 93000ppm

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
.7 cuft	Gas	
20 cc	Mud	Rw.083070F 93000ppm
Pressure: 125	GOR: 0	GLR: 5559

INTERPRETATION RESULTS

Model of Behavior
Fluid Type Used for Analysis..
Reservoir Pressure (psi)
Transmissibility (md.ft/cp) ..
Effective Permeability (md) ..
Skin Factor/Damage Ratio
Storativity Ratio, Omega
Interporos.Flow Coef., Lambda..
Distance to an Anomaly (ft) ..
Radius of Investigation (ft)..
Potentiometric Surface (ft) ..

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)	
Basic Solids (%)	
Gas Gravity	
GOR (scf/STB)	
Water Cut (%)	
Viscosity (cp)	
Total Compressibility (1/psi)	
Porosity (%)	
Reservoir Temperature (F)	138
Form. Vol. Factor (bbl/STB)	

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

This DST on the Morrow formation flowed .44 bbls of drilling fluid into test string. If you have any questions call Schlumberger Testing. Thank you.

WELL TEST INTERPRETATION REPORT #:132188		PAGE: 2,
CLIENT : Thornton Operating Company		13-APR-94
REGION :CSD	SEQUENCE OF EVENTS	FIELD:Wildcat
DISTRICT:Midland		ZONE :Morrow
BASE :Hobbs N.M.		WELL :SM Fed #1
ENGINEER:Mark Luna		LOCATION:S6-13S-29E

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
=====					
11-APR	17:17	Set Packers	-1		
	17:18	Start Flow on 1/8" Choke	0	44	.5"
	17:23	Weak Blow in H2O	5		4.25"
	17:28		10		9"H2O
	17:32	Bottom of Bucket	14		8 ozs
	17:33	End Flow & Start Shutin	15	46	8 ozs
	18:32	End Shutin	74	904	
	18:34	Start Flow on 1/8 Choke	76	52	88
	18:39	Good Blow Reading in PSI	81		2.0
	18:49		91		2.5
	19:04	Open on 1/4 Choke	106		2.5
	19:09	Surface Pressure Dropping	111		2.25
	19:33	End Flow & Start Shutin	135	54	1.0
	22:33	End Shutin	315	1957	
	22:40	Pulled Loose	322	4217	

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 132188

COMPANY : Thornton Operating Company

INSTRUMENT NO. 20319

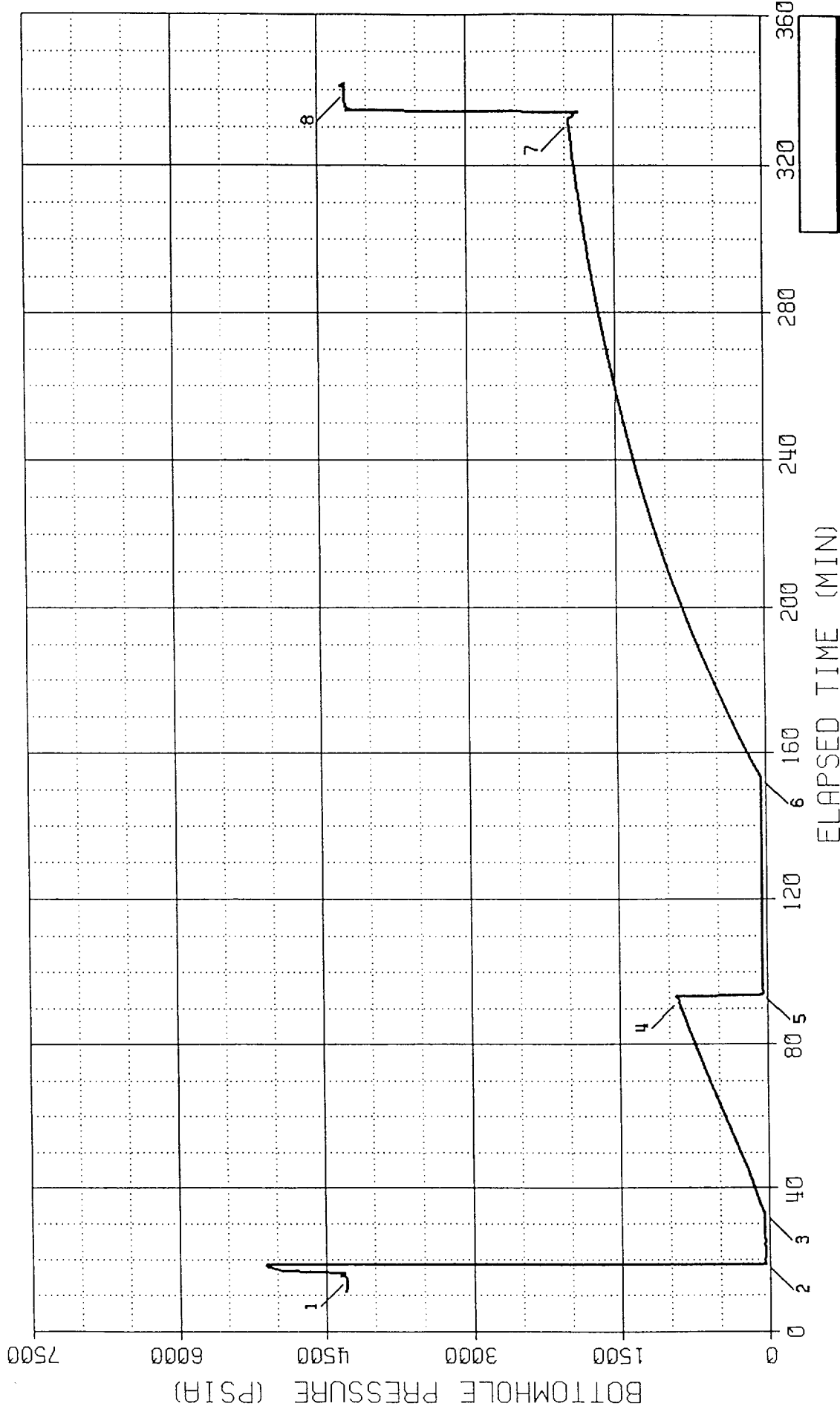
WELL : Seagull Midcon Federal #1

DEPTH : 8247 FT

CAPACITY : 10014 PSI

PORT OPENING : INSIDE

Electronic Pressure Data



Schlumberger

 ** WELL TEST DATA PRINTOUT **

COMPANY: Thornton Operating Company
 WELL: Seagull Midcon Federal #1

FIELD REPORT NO. 132188
 INSTRUMENT NO. 20319

RECORDER CAPACITY: 10014 PSI PORT OPENING: INSIDE DEPTH: 8247 FT

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F
1	17:14:00	11-APR	HYDROSTATIC MUD	14.00	4290.61	133.83
2	17:18:48	11-APR	START FLOW	18.80	44.06	133.95
3	17:32:24	11-APR	END FLOW & START SHUT-IN	32.40	46.49	134.38
4	18:31:48	11-APR	END SHUT-IN	91.80	903.56	138.76
5	18:33:48	11-APR	START FLOW	93.80	52.03	138.80
6	19:33:00	11-APR	END FLOW & START SHUT-IN	153.00	53.63	136.73
7	22:31:00	11-APR	END SHUT-IN	331.00	1956.91	140.64
8	22:39:00	11-APR	HYDROSTATIC MUD	339.00	4216.53	141.85

SUMMARY OF FLOW PERIODS

IOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	18.80	32.40	13.60	44.06	46.49	44.06
2	93.80	153.00	59.20	52.03	53.63	52.03

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	32.40	91.80	59.40	46.49	903.56	46.49	13.60
2	153.00	331.00	178.00	53.63	1956.91	53.63	72.80

REPORT NO.
139146

PAGE NO. 1

TEST DATE:
17-Apr-1994

S T A R

Schlumberger Testing Data Report

Pressure Data Report

Schlumberger

COMPANY: Thornton Operating Company

WELL: Seagull Federal #1

TEST IDENTIFICATION

Test Type OH DST/SPRO
Test No. Two
Formation Devonian
Test Interval (ft) 9126 to 9170
Depth Reference KB

WELL LOCATION

Field Wildcat
County Chaves
State New Mexico
Sec/Twn/Rng S6T13SR29E
Elevation (ft) 3688

HOLE CONDITIONS

Total Depth (MD/TVD) (ft) 9170
Hole Size (in) 7.875
Casing/Liner I.D. (in)
Perf'd Interval/Net Pay (ft) .. / 7
Shot Density/Diameter (in) ...

MUD PROPERTIES

Mud Type
Mud Weight (lb/gal) 9.3
Mud Resistivity (ohm.m) 0.1097 @ 60F
Filtrate Resistivity (ohm.m)..
Filtrate Chlorides (ppm) 78000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) 4574.29
Gas Cushion Type
Surface Pressure (psi)
Liquid Cushion Type
Cushion Length (ft)

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ... 8241 / 3.83
Collar Length (ft)/I.D. (in) .. 827 / 2.25
Packer Depths (ft)
Bottomhole Choke Size (in) ... 0.50
Gauge Depth (ft)/Type 9096/S/B

NET PIPE RECOVERY

Volume	Fluid Type	Properties
6374 ft	Gas cut	Rw0.128@60F 65000ppm
	Drilling	
	Fluid with	
	trace oil	

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
.24 cuft	Gas	
1200 cc	Oil	API 44@60F
900 cc	Mud	Rw0.128@60F 65000pp
Pressure: 68		GOR: 32
		GLR: 18

INTERPRETATION RESULTS

Model of Behavior
Fluid Type Used for Analysis..
Reservoir Pressure (psi)
Transmissibility (md.ft/cp) ..
Effective Permeability (md) ..
Skin Factor/Damage Ratio
Storativity Ratio, Omega
Interporos.Flow Coef., Lambda..
Distance to an Anomaly (ft) ..
Radius of Investigation (ft)..
Potentiometric Surface (ft) ..

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)
Basic Solids (%)
Gas Gravity
GOR (scf/STB)
Water Cut (%)
Viscosity (cp)
Total Compressibility (1/psi)..
Porosity (%) 10
Reservoir Temperature (F) 224
Form.Vol.Factor (bbl/STB)

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

This test was not mechanically successful due to a drill pipe leak. Thank you for using Schlumberger Testing Services. If you have any questions, please call (915)- 563-1434 or (505)-393-4307.

WELL TEST INTERPRETATION REPORT #:139146		PAGE: 2,
CLIENT : Thornton Operating Company		18-APR-94
REGION :CSD	SEQUENCE OF EVENTS	FIELD:Wildcat
DISTRICT:Midland		ZONE :Devonian
BASE :Midland		WELL :Seagull #1
ENGINEER:Mark Pitts		LOCATION:S6T13SR29E

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
17-APR	07:35	Hydrostatic Mud	-3	4574	
	07:38	START FLOW	0	2691	
	07:39	7" Blow	1		
	07:43	7" Blow	5		
	07:48	7" Blow	10		
	07:50	7" Blow	12		
	07:51	END FLOW & START SHUTIN	13	2753	
	08:29	END SHUTIN	51	3686	
	08:31	START FLOW	53	2741	
	08:59	END FLOW & START SHUTIN	81	2753	
	10:46	END SHUTIN	188	3619	
	10:48	Pulled Loose	190	4572	

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 139146

COMPANY : Thornton Operating Company

INSTRUMENT NO. 20319

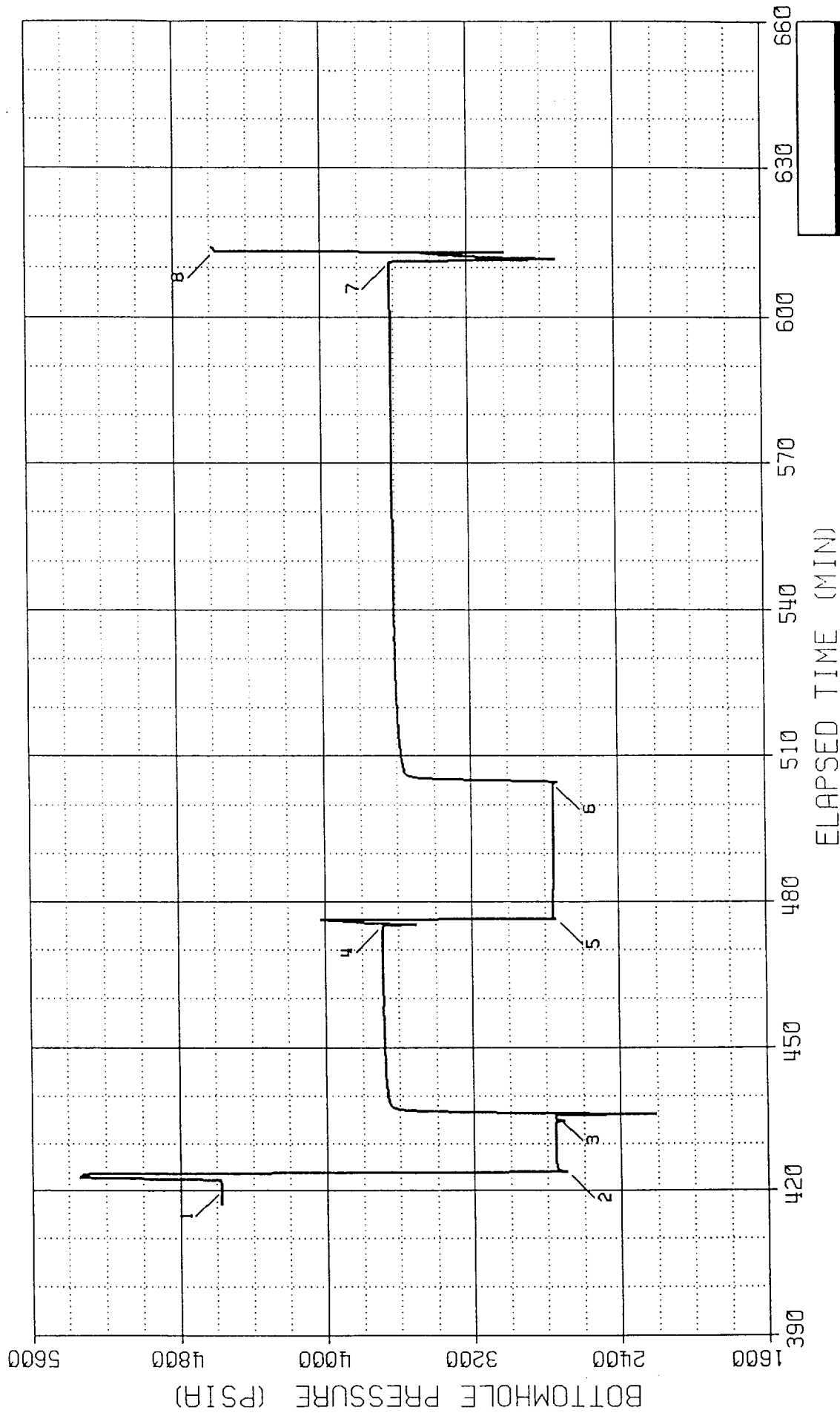
WELL : Seagull Federal #1

DEPTH : 9096 FT

CAPACITY : 10014 PSI

Electronic Pressure Data

PORT OPENING : INSIDE



Schlumberger

 ** WELL TEST DATA PRINTOUT **

COMPANY: Thornton Operating Company
 WELL: Seagull Federal #1

FIELD REPORT NO. 139146
 INSTRUMENT NO. 20319

RECORDER CAPACITY: 10014 PSI PORT OPENING: INSIDE DEPTH: 9096 FT

LABEL POINT INFORMATION

	TIME OF DAY	DATE		ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F
#	HH:MM:SS	DD-MMM	EXPLANATION			
1	7:35:00	17-APR	HYDROSTATIC MUD	420.00	4574.29	143.90
2	7:38:48	17-APR	START FLOW	423.80	2691.08	144.08
3	7:51:00	17-APR	END FLOW & START SHUT-IN	436.00	2752.99	146.05
4	8:29:48	17-APR	END SHUT-IN	474.80	3686.26	146.67
5	8:31:24	17-APR	START FLOW	476.40	2740.51	146.66
6	8:59:24	17-APR	END FLOW & START SHUT-IN	504.40	2753.04	147.06
7	10:46:00	17-APR	END SHUT-IN	611.00	3619.10	148.10
8	10:48:12	17-APR	PULLED LOOSE	613.20	4572.22	148.19

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	423.80	436.00	12.20	2691.08	2752.99	2691.08
2	476.40	504.40	28.00	2740.51	2753.04	2740.51

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	436.00	474.80	38.80	2752.99	3686.26	2752.99	12.20
2	504.40	611.00	106.60	2753.04	3619.10	2753.04	40.20

REPORT NO.
139414

PAGE NO. 2

CALCULATIONS
LIQUID WELL
LOG-LOG ANALYSIS

Schlumberger

LOG (DELTA P) VS. LOG (DELTA T) PLOT

HOMOGENEOUS, INFINITE SYSTEM
SKIN & VARIABLE WELLBORE STORAGE
PD VS. TD/CD

DATA IDENTIFICATION

FLOW PERIOD = 2, BUILDUP
P = 199.64 PSI @ DELTA T=0
FLOW RATE CHANGE = 15.750 STB/D LIQUID

DOWNHOLE RATES (IN RESERVOIR BBL/D)

OIL 16.585 (WITH $B_o=1.053$ BBL/STB)
FREE GAS ... 7.270 (WITH $B_g=0.01503$ BBL/SCF AND
 $R_{so}=37.560$ SCF/STB)

COMPUTED WITH PRODUCING WATER CUT = 0.000
AND PRODUCING GAS/LIQUID RATIO = 68.271 SCF/STB

TYPE-CURVE MATCH

CURVE MATCH, $CD \cdot E(2S) = 3.71681E6$
PRESSURE MATCH, $PD/\Delta P = 0.004071$ 1/PSI
TIME MATCH, $(TD/CD)/\Delta T = 1706.7$ 1/HR

CALCULATIONS

K/MU (TOTAL) 1.371 MD/CP
KH/MU (TOTAL) 13.712 MD.FT/CP
 K_o (EFFECTIVE TO OIL) 0.9743 MD
 K_g (EFFECTIVE TO GAS) 0.005458 MD
C 2.370E-06 BBL/PSI
CD 0.4565
SKIN, S 7.956
RADIUS OF INVESTIGATION ... 29.314 FT (@ 3.211 HR)

COMMENTS

USING HOMOGENEOUS, SKIN & VARIABLE WELLBORE STORAGE
RESERVOIR MODEL; $C_a/C=19.25$ (1) 0.97 (2) 0.9 (3) 26 (4)
 $C_oD=43$ (1) 32.7 (2) 11.9 (3) 46.3 (4)

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 139414 COMPANY : Thornton Operating Corporation

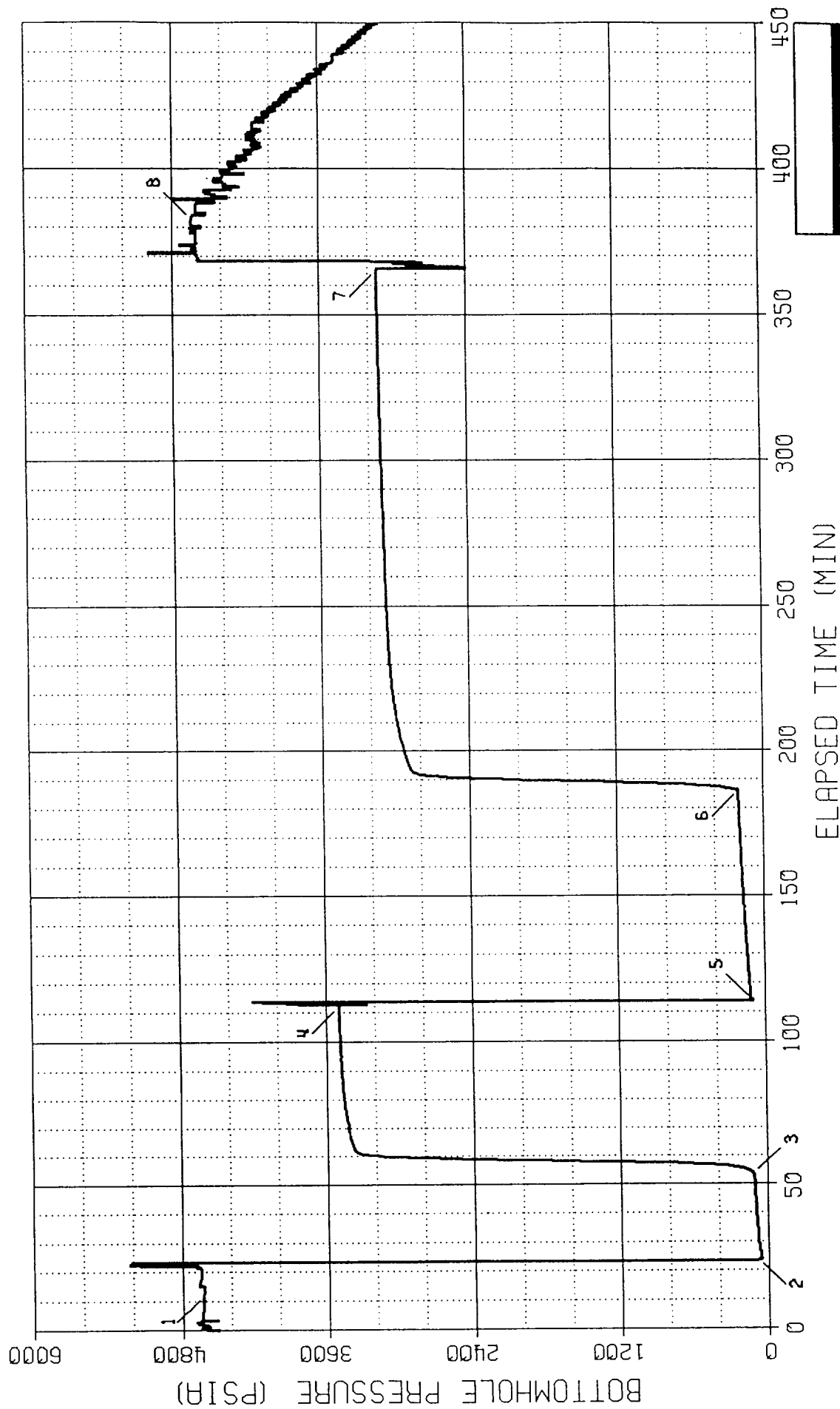
INSTRUMENT NO. 20319 WELL : Seagull Midcon Federal #1

DEPTH : 9084 FT

CAPACITY : 10014 PSI

PORT OPENING : INSIDE

ELECTRONIC GAUGE PRESSURE DATA



 ** WELL TEST DATA PRINTOUT **

COMPANY: Thornton Operating Corporation
 WELL: Seagull Midcon Federal #1

FIELD REPORT NO: 139414
 INSTRUMENT NO. 20319

RECORDER CAPACITY: 10014 PSI PORT OPENING: INSIDE DEPTH: 9084 FT

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F
1	9:42:00	18-APR	HYDROSTATIC MUD	12.00	4629.22	140.39
2	9:53:36	18-APR	START FLOW	23.60	81.08	141.23
3	10:23:24	18-APR	END FLOW & START SHUT-IN	53.40	107.71	143.63
4	11:22:00	18-APR	END SHUT-IN	112.00	3496.55	146.99
5	11:24:00	18-APR	START FLOW	114.00	96.27	146.97
6	12:36:00	18-APR	END FLOW & START SHUT-IN	186.00	199.64	151.29
7	15:35:00	18-APR	END SHUT-IN	365.00	3129.12	149.50
8	15:53:00	18-APR	HYDROSTATIC MUD	383.00	4644.58	150.40

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	23.60	53.40	29.80	81.08	107.71	81.08
2	114.00	186.00	72.00	96.27	199.64	96.27

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	53.40	112.00	58.60	107.71	3496.55	107.71	29.80
2	186.00	365.00	179.00	199.64	3129.12	199.64	101.80

REPORT NO.
139379

PAGE NO. 1

TEST DATE:
20-apr-94

STAR

Schlumberger Testing Data Report Pressure Data Report

Schlumberger

COMPANY: THORNTON OPERATING COMPANY

WELL: SEAGULL MIDCOM FEDERAL #1

TEST IDENTIFICATION

Test Type Open Hole DST
Test No. FOUR
Formation Devonian
Test Interval (ft) 9100 to 9177
Depth Reference GL

WELL LOCATION

Field Wildcat
County Chavez
State New Mexico
Sec/Twn/Rng S6-13S-29E
Elevation (ft) 3674

HOLE CONDITIONS

Total Depth (MD/TVD) (ft) 9177
Hole Size (in) 7.875
Casing/Liner I.D. (in) 8.625 2097
Perf'd Interval/Net Pay (ft) .. / 15
Shot Density/Diameter (in) ...

MUD PROPERTIES

Mud Type SaltGel/Starch/
Mud Weight (lb/gal) 9.2
Mud Resistivity (ohm.m)1 @ 78F
Filtrate Resistivity (ohm.m)..
Filtrate Chlorides (ppm) 63000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) 4625.08
Gas Cushion Type
Surface Pressure (psi)
Liquid Cushion Type
Cushion Length (ft)

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ... 8287 / 3.826
Collar Length (ft)/I.D. (in) .. 765 / 2.25
Packer Depths (ft) 9094,9100,
Bottomhole Choke Size (in) ... 1.0
Gauge Depth (ft)/Type 9073/SB-20319

NET PIPE RECOVERY

Volume	Fluid Type	Properties
	Heavy Gas	Rw.11@78F 57000ppm
403 ft	Cut Mud w/	API 44@60F
	Oil	

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
.29 cuft	Gas	
400 cc	Oil	API 44@60F
1800 cc	Mud	Rw.11@78F 57000ppm
Pressure:150		GOR:115 GLR:21

INTERPRETATION RESULTS

Model of Behavior
Fluid Type Used for Analysis..
Reservoir Pressure (psi)
Transmissibility (md.ft/cp) ..
Effective Permeability (md) ..
Skin Factor/Damage Ratio
Storativity Ratio, Omega
Interporos.Flow Coef.,Lambda..
Distance to an Anomaly (ft) ..
Radius of Investigation (ft)..
Potentiometric Surface (ft) ..

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)
Basic Solids (%)
Gas Gravity
GOR (scf/STB)
Water Cut (%)
Viscosity (cp)
Total Compressibility (1/psi)..
Porosity (%) 6
Reservoir Temperature (F) 146
Form.Vol.Factor (bbl/STB)

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

This DST was a mechanically successful test. The first attempt to test the zone was not started because of a drill pipe leak. This test had no leaks. The zone flowed 1.97 bbls. of heavy gas & oil cut mud. Thank You.

WELL TEST INTERPRETATION REPORT #:139379		PAGE: 2,
CLIENT : THORNTON OPERATING COMPANY		26-APR-94
REGION :CSD	SEQUENCE OF EVENTS	FIELD:Wildcat
DISTRICT:HOBBS		ZONE :Devonian
BASE :Hobbs N.M.		WELL :SM Fed #1
ENGINEER:KIRK BEASLEY		LOCATION:S6-13S-29E

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
	00:07	SET PACKER	-34		
	00:33	RESET PACKER	-8		
	00:30	Hydrostatic Mud	-11	4625	
	00:37	Cycled Tool	-4		
	00:41	START FLOW	0	74	
		OPEN TO BUBBLE HOSE ONLY			
	00:43	WEAK BLOW	2		0.5"
	00:50		9		2.0"
	01:00		19		2.5"
	01:20	BLOW DECREASING	39		2.0"
	02:20		99		1.5"
	02:40		119		1.25"
	02:43	END FLOW & START SHUTIN	122	206	
	08:44	END SHUTIN	483	3246	
	08:47	PULLED LOOSE	486		
	08:50	Hydrostatic Mud	489	4606	

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 139379 COMPANY : THORNTON OPERATING COMPANY

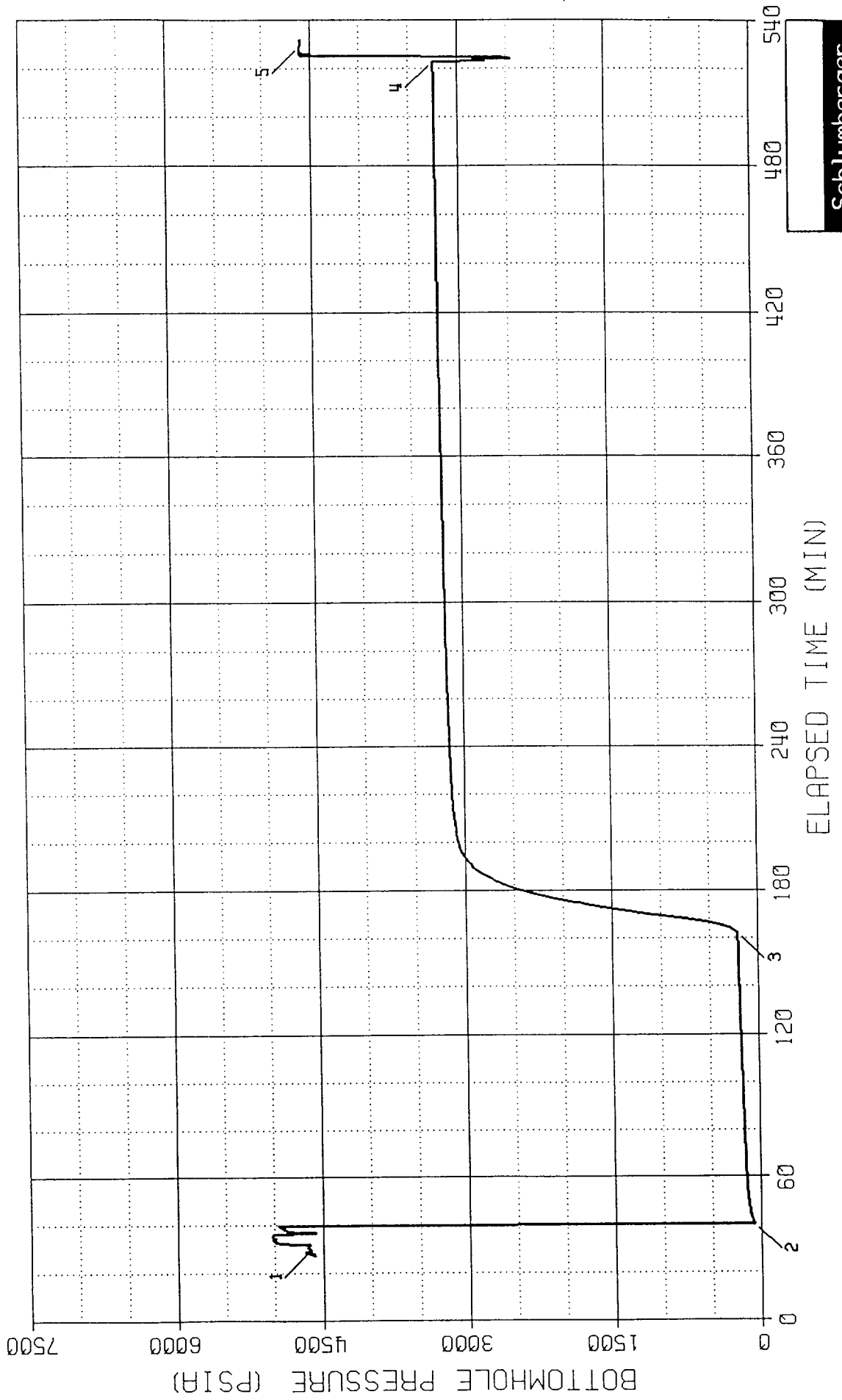
INSTRUMENT NO. 20319 WELL : SEAGULL MIDCOM FEDERAL #1

DEPTH : 9073 FT

CAPACITY : 10014 PSI

PORT OPENING : INSIDE

Electronic Pressure Data



Schlumberger

 ** WELL TEST DATA PRINTOUT **

COMPANY: THORNTON OPERATING COMPANY
 WELL: SEAGULL MIDCOM FEDERAL #1

FIELD REPORT NO. 139379
 INSTRUMENT NO. 20319

RECORDER CAPACITY: 10014 PSI PORT OPENING: INSIDE DEPTH: 9073 FT

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F
1	0:30:24	21-APR	HYDROSTATIC MUD	29.40	4625.08	139.34
2	0:41:00	21-APR	START FLOW	40.00	74.03	139.25
3	2:43:00	21-APR	END FLOW & START SHUT-IN	162.00	206.44	141.96
4	8:43:48	21-APR	END SHUT-IN	522.80	3245.73	145.59
5	8:50:00	21-APR	HYDROSTATIC MUD	529.00	4605.53	146.26

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	40.00	162.00	122.00	74.03	206.44	74.03

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	162.00	522.80	360.80	206.44	3245.73	206.44	122.00

DST #5 (DEVONIAN)

REPORT NO.

139380

PAGE NO. 1

S T A R

Schlumberger Testing Data Report

THORNTON
Schlumberger

TEST DATE:

22-APR-94

Pressure Data Report

COMPANY: THORNTON OPERATING

WELL: SEAGULL MIDCON FEDERAL #1

TEST IDENTIFICATION

Test Type Open Hole DST
 Test No. FIVE
 Formation Devonian
 Test Interval (ft) 9187 to 9234
 Depth Reference GL

WELL LOCATION

Field Wildcat
 County Chaves
 State New Mexico
 Sec/Twn/Rng S6-13S-29E
 Elevation (ft) 3674

HOLE CONDITIONS

Total Depth (MD/TVD) (ft) 9234
 Hole Size (in) 7.875
 Casing/Liner I.D. (in) 8.625 2097
 Perf'd Interval/Net Pay (ft) .. / 8
 Shot Density/Diameter (in) ...

MUD PROPERTIES

Mud Type SaltGel/Starch/
 Mud Weight (lb/gal) 9.4
 Mud Resistivity (ohm.m)09 @ 77F
 Filtrate Resistivity (ohm.m)..
 Filtrate Chlorides (ppm) 74000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) 4729.83
 Gas Cushion Type
 Surface Pressure (psi)
 Liquid Cushion Type
 Cushion Length (ft)

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ... 8339 / 3.826
 Collar Length (ft)/I.D. (in) .. 795 / 2.25
 Packer Depths (ft) 9181, 9187,
 Bottomhole Choke Size (in) ... 1.0
 Gauge Depth (ft)/Type 9155/SB-20393

NET PIPE RECOVERY

Volume	Fluid Type	Properties
2200 ft	WATER TOP	Rw.16070F 42000ppm
17.1 bbl	MIDDLE	Rw.19070F 36000ppm
	BOTTOM	Rw.24060F 32000ppm

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
2440 cc	Water	Rw.24060F 32000ppm
Pressure: 35		GOR: 0
		GLR: 0

INTERPRETATION RESULTS

Model of Behavior
 Fluid Type Used for Analysis..
 Reservoir Pressure (psi)
 Transmissibility (md.ft/cp) ..
 Effective Permeability (md) ..
 Skin Factor/Damage Ratio
 Storativity Ratio, Omega
 Interporos.Flow Coef..Lambda..
 Distance to an Anomaly (ft) ..
 Radius of Investigation (ft)..
 Potentiometric Surface (ft) ..

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)
 Basic Solids (%)
 Gas Gravity
 GOR (scf/STB)
 Water Cut (%)
 Viscosity (cp)
 Total Compressibility (1/psi).
 Porosity (%) 7
 Reservoir Temperature (F) 154
 Form.Vol.Factor (bbl/STB)

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

Drillstem test #5 was successful. The formation produced 17.1 bbl. of water. Thank you for using SCHLUMBERGER TESTING.

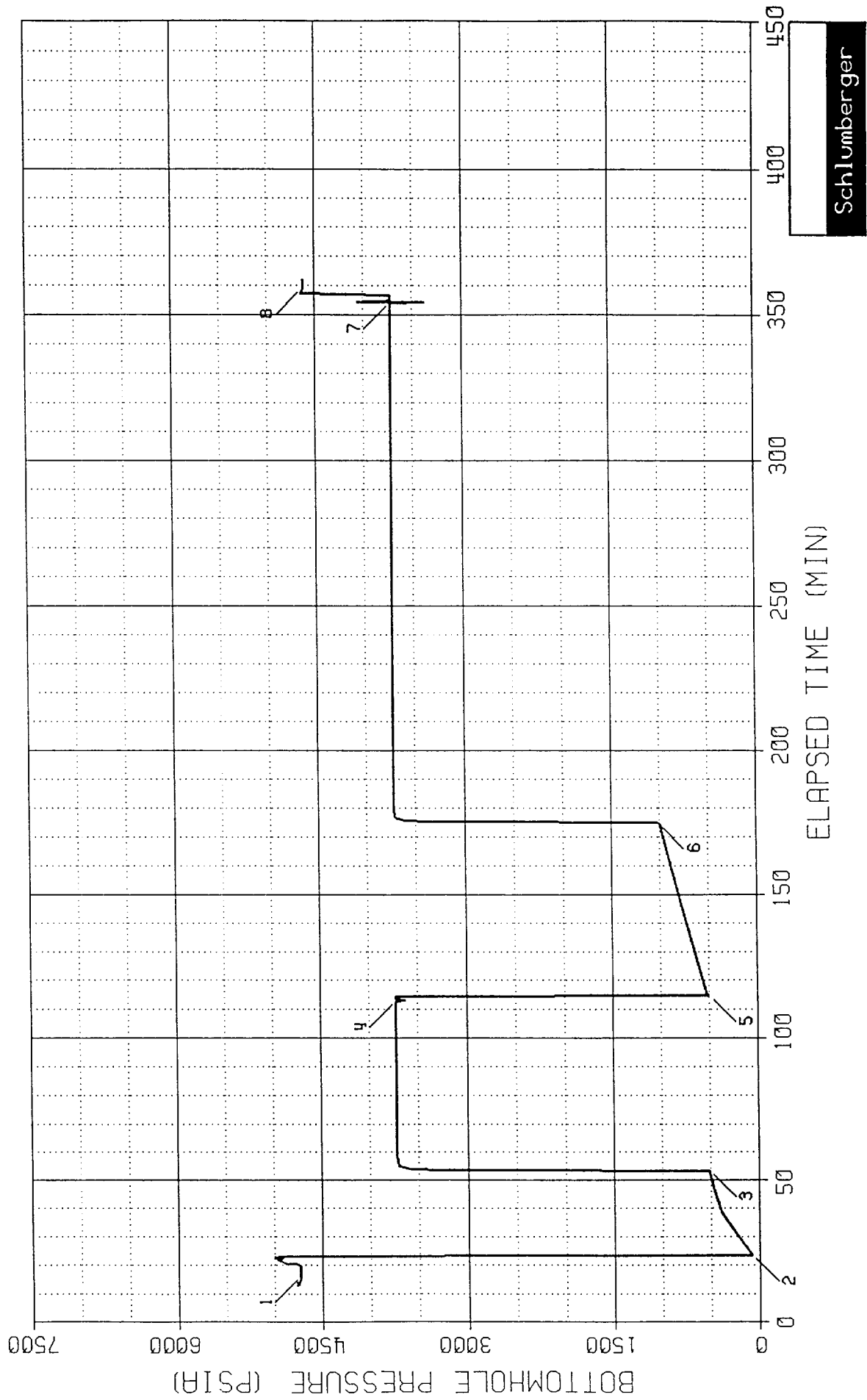
WELL TEST INTERPRETATION REPORT #:139380		PAGE: 2,
CLIENT : THORNTON OPERATING		23-APR-94
REGION :CSD	SEQUENCE OF EVENTS	FIELD:Wildcat
DISTRICT:HOBBS		ZONE :Devonian
BASE :Hobbs N.M.		WELL :SM Fed #1
ENGINEER:KIRK BEASLEY		LOCATION:S6-13S-29E

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
22-APR	11:20	SET PACKER	-3		
	11:23	START FLOW OPEN TO BUBBLE HOSE ONLY	0	85	
	11:24		1		2"
	11:30	BLOW INCREASING	7		6"
	11:35	BOTTOM OF BUCKET	12		
	11:45		22		.75#
	11:53	END FLOW & START SHUTIN OPEN TO PIT	30	514	.90#
	12:53	END SHUTIN	90	3719	
	12:54	START FLOW OPEN TO BUBBLE HOSE ONLY	91	500	
	12:56		93		1"
	13:00	BLOW INCREASING	97		4"
	13:15		112		16"
	13:30		127		1.0#
	13:55	END FLOW & START SHUTIN	152	1015	1.4#
	16:54	END SHUTIN	331	3720	
	16:57	PULLED LOOSE PULLED TO FLUID	334		

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 139380 COMPANY : THORNTON OPERATING
INSTRUMENT NO. 20393 WELL : SEAGULL MIDCON FEDERAL #1

DEPTH : 9155 FT
CAPACITY : 11013 PSI
PORT OPENING : INSIDE
Electronic Pressure Data



 ** WELL TEST DATA PRINTOUT **

COMPANY: THORNTON OPERATING
 WELL: SEAGULL MIDCON FEDERAL #1

FIELD REPORT NO. 139380
 INSTRUMENT NO. 20393

RECORDER CAPACITY: 11013 PSI PORT OPENING: INSIDE DEPTH: 9155 FT

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F
1	11:16:00	22-APR	HYDROSTATIC MUD	16.00	4729.83	132.42
2	11:23:24	22-APR	START FLOW	23.40	84.93	133.66
3	11:53:00	22-APR	END FLOW & START SHUT-IN	53.00	514.00	158.68
4	12:52:48	22-APR	END SHUT-IN	112.80	3719.17	153.87
5	12:54:36	22-APR	START FLOW	114.60	499.76	153.69
6	13:55:00	22-APR	END FLOW & START SHUT-IN	175.00	1015.03	163.84
7	16:54:00	22-APR	END SHUT-IN	354.00	3719.70	152.42
8	16:59:00	22-APR	HYDROSTATIC MUD	359.00	4620.20	152.32

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	23.40	53.00	29.60	84.93	514.00	84.93
2	114.60	175.00	60.40	499.76	1015.03	499.76

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	53.00	112.80	59.80	514.00	3719.17	514.00	29.60
2	175.00	354.00	179.00	1015.03	3719.70	1015.03	90.00