

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	State of New-Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 July 17, 2008
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1. WELL API NO. 30-005-64022	2. Type of Lease ☐ STATE ☒ FEE ☐ FED/INDIAN
3. State Oil & Gas Lease No.	

WELL COMPLETION OR RECOMPLETION REPORT AND LOG	
4. Reason for filing: ☒ COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) ☐ C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)	5. Lease Name or Unit Agreement Name Crystal Diamond 6. Well Number: 133 JAN 23 2009 OGD-ARTESIA
7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER	
8. Name of Operator Waterford Operating, LLC	9. OGRID 259169
10. Address of Operator Suite 2000 1001 McKinney Street, Houston, TX 77002	11. Pool name or Wildcat Chaves Undesignated; Miss(Gas)

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	J	33	12S	28E	J	1980	S	2488	E	Chaves
BH:										

13. Date Spudded 07-02-08	14. Date T.D. Reached 08-01-08	15. Date Rig Released 08-04-08	16. Date Completed (Ready to Produce) 12-19-08	17. Elevation GL-3599' KB3615' DF-3614'
18. Total Measured Depth of Well 7920'	19. Plug Back Measured Depth 7844'	20. Was Directional Survey Made? no	21. Type Electric and Other Logs Run GR-OH-C-Sub	

22. Producing Interval(s), of this completion - Top, Bottom, Name 7710-7715; 7739-7744; 7752-7757; 7762-7767; 7775-7780	
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23. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
11-3/4"	42#	347'	14-3/4"	250 sx Prem. Plus C	-
8-5/8"	32#	1905'	11"	725 sx Prem. Plus C	-
5-1/2"	17#	7914'	7-7/8"	250 sx 35/65/6C	-
				\$225 sx of Class H	

24. LINER RECORD				25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET
-					2-3/8"	7593'
						Arrow Set IX @ 7593'

26. Perforation record (interval, size, and number) Perf w/3-1/8" gun, 3 spf - 7710-7715; 7739-7744; 7752-7757; 7762-7767; 7775-7780		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 7790-7844 Acidized w/500 gals 15% HCL & 200 gals 7-1/2% HCL 7710-7780 Acidize perfs w/4800 gals 15% HCL NEFE. Frac w/65,369#s 40/70 Econoprop. Shut-in pending workover.	
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28. PRODUCTION							
Date First Production		Production Method (Flowing, gas lift, pumping - Size and type pump)			Well Status		
					40/70 Econoprop. Shut-in pending workover.		
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - (Corr.)	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)	30. Test Witnessed By

31. List Attachments		

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.		

33. If an on-site burial was used at the well, report the exact location of the on-site burial:		

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief	Signature Linda Renken Printed Name Linda Renken E-mail Address Lrenken@freedom-resources.com	Title Permitting & Regulatory Coordinator Date 01-15-09	Latitude _____ Longitude _____ NAD 1927 1983
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INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A"
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T. Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T. Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T. Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....
 No. 2, from.....to.....
 No. 3, from.....to.....
 No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

TVD From	To	Thickness In Feet	Lithology	TVD From	To	Thickness In Feet	Lithology
159			Redbeds, anhydrite, halite	5513			Dolomite, f-xline to dense, cherty, sandy, w/red-green-gray shale, anhydritic in lower part
260			Anhydrite, dolomite				
323			Anhydrite, dolomite	6070			Upper 120': Dolomite, vfx-dense, sli cherty, changing to shaly Limestone w/minor chert, dolomite and red-green-gray shale
450			Dolomite, anhydrite, w/ interbedded sandstone, siltstone				
992			Sandstone, fg, siltstone, interbedded anhydrite	6495			Limestone, vf-dense, shaly, w/rd-org-gry shale, minor chert & vf-xline dolomite
1102			Sandstone, anhydrite	6644			Limestone, f-xline, fossiliferous, w/red-purple shale
1315			Dolomite, anydrite, w/interbedded shale, sandstone	6780			Limestone, f-xline, fossiliferous, dolomitic in part, w/minor chert, varigated colored to gry shale
1580			Dolomite, micro-vf xline, w/interbedded anhydrite, shale, tr chert	7099			Limestone, vf xline to dense, fossiliferous, w/varigated colored to gry shale, minor chert
2317			Limestone, micro-vf xline, shale, gy-blk, anhydrite, dolomite, vf xline, sandstone, uncon, f-mg	7214			Limestone, f-xline, fossiliferous, w/glaucconitic sandstone, f-cg clear grains, vari-colored shale, cherty, arkosic
2910			Sandstone, unconsol, vfg-m grained, orange-red-clear w/red sandy shale	7408			Shale, gray to blk, carbonaceous, w/limestone, fossiliferous, chert, coal, vfg sandstone
2986			Anhydrite, dolomite, f-xline, lt red, gry shale, vfg sandstone, w/thin salt beds (?)				
3648			Dolomite, vfx-dense, w/ gry-wh anhydrite, red & gry shale, sandstone	7500			Limestone, tan-crm, fossiliferous, oolitic
4337			Sandstone, well-rounded, clear to frosted, vfg, some unconsolidated, w/red-brn shale	7535			Limestone, vf xline, wh-tan, chalky, fossiliferous, oolitic, w/chert, tr sandstone
4485			Dolomite, vfx-dense, anhydritic, sandy, w/ sandstone, clear, rdd to ang, red-gry shale, anhydrite	7685			Limestone, vf xline, chalky, minor chert
5134			Shale, orange-red-green-gray, soft to firm, with some anhydrite and dolomite	7752			Limestone, vf xline, sandy, cherty
				7953			Shale, gry, calcareous, shaly limestone



WELL NAME AND NUMBER Crystal Diamond #0133

LOCATION Section 33, T 23S, R 28E, 1980 FSL, 2468 FEL, Chaves County

OPERATOR Waterford Operating, LLC

DRILLING CONTRACTOR United Drilling, Inc.

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above described well and had conducted deviation test and obtained the following results:

Degrees @ Depth	Degrees @ Depth	Degrees @ Depth
1/4 @ 98'	1/2 @ 5204'	
1/2 @ 253'	1/2 @ 5616'	
1/2 @ 314'	1/2 @ 5934'	
3/4 @ 684'	1/2 @ 6476'	
3/4 @ 1000'	1/2 @ 6930'	
3/4 @ 1292'	1/2 @ 7253'	
1/2 @ 1609'	1/4 @ 7533'	
1/4 @ 2193'		
1/4 @ 2668'		
3/4 @ 3044'		
1/2 @ 3426'		
1/2 @ 3712'		
1/4 @ 4004'		
3/4 @ 4316'		
3/4 @ 4607'		
1/2 @ 4925'		

Drilling Contractor- UNITED DRILLING, INC.

By: *Luisa Garcia*
(Luisa Garcia)

Title: Assistant Office Manager

Subscribed and sworn to before me this 5 day of August, 2008

Mary A. Aho
Notary Public

Chaves, NM
County State

My Commission Expires:

10-8-08



COMPANY : WATERFORD OPERATING, LLC
LEASE : CRYSTAL DIAMOND
WELL NO. : # 133
FIELD : CHAVES UNDES (MISS)
COUNTY/STATE : CHAVES / N.M.

TEST DATE : 07/10/08
D.S.T. NO. : 1
TEST TKT. NO. : 24712
INVOICE NO. : 22794
ORDER NO. :

FORMATION TEST REPORT



CORPORATE OFFICE:

ABILENE, TEXAS
P.O. BOX 172-79604
325-673-2771

MIDLAND OFFICE
3218 COMMERCIAL DR. 79701
432-570-0421

GRAHAM OFFICE
P.O. BOX 543-76450
940-549-5681



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FORMATION : UPPER SAN ANDRES HOLE SIZE (in) : 7.875 ANCHOR LENGTH (ft): 65
INTERVAL (ft) : 2075 TO 2140 DRILL PIPE ID (in) : 3.82 TOOL LENGTH (ft) : 74
TOTAL DEPTH (ft): 2140 DRILL COLLAR ID(in): 2.25 TOOL O.D. (in) : 5
ELEVATION (ft) : 3599 DRILL COLLAR feet : 708 PACKER SIZE (in) : 7.00

RECORDER DATA
AK-1KUSTER / STELLAR

TOP RECORDER: IN
RECORDER NO. : 20234
CAPACITY (psi): 10000
DEPTH (ft) : 2088
CLOCK NO. : 20234
DURATION (hrs): 99

BOTTOM RECORDER: OUT
RECORDER NO. : 13545
CAPACITY (psi): 8100
DEPTH (ft) : 2137
CLOCK NO. : 17908
DURATION (hrs): 24

MUD PROPERTIES

MUD TYPE : FRESH WATER
MUD WT. (#/gal) : 8.80

WATER LOSS (cc) :
FILTER CAKE (in) :
VISCOSITY (sec) : 29

CHLORIDE PPM : 32000
RESISTIVITY(ohm-m): .115

EQUIPMENT DATA

CONVENTIONAL : YES
STRADDLE : NO
SELECTIVE ZONE : NO
SAMPLE CHAMBER : YES
GAS ANALYSIS : NO

ROTARY JARS : YES
NO. OF PACKERS : 2
SAFETY JOINT : YES
CIRCULATING SUB : YES
REVERSED OUT : NO

MULTIFLOW : NO
MILEAGE : NO
OPERATOR TIME : NO
OTHER : YES
STELLAR ELECTRONICS(2)

SUCCESSFUL : YES

PACKER FAILURE : NO

TOOL PLUG : NO

DECIDED NOT TO TEST : NO

FAIL TO REACH BOTTOM : NO

TIME INTERVAL DATA (min)

TOOL OPENED : 1:20 AM

TOTAL TEST TIME: 143

INITIAL FLOW : 16
SECOND FLOW : 29
THIRD FLOW :

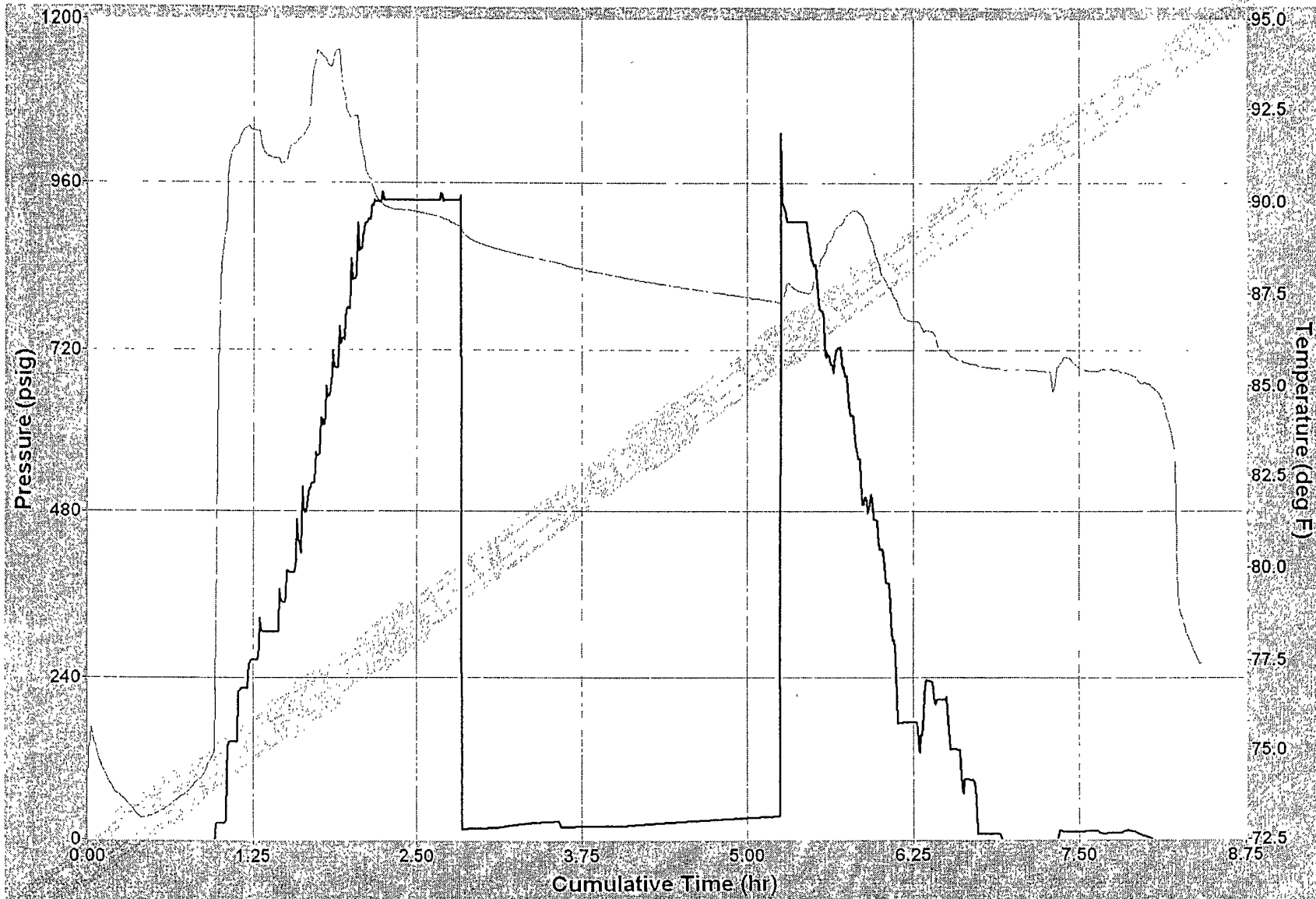
INITIAL SHUT-IN: 28
SECOND SHUT-IN : 70
THIRD SHUT IN :

TEST TOOL OPERATOR: JIMMY PIPPINS

Company Name WATERFORD OPERATING, LLC
Well Name CRYSTAL DIAMOND #133
Type of Test DST #1 (2075-2140 FT.; UPPER SAN ANDRES)
Date(s) of Test 7-10-08



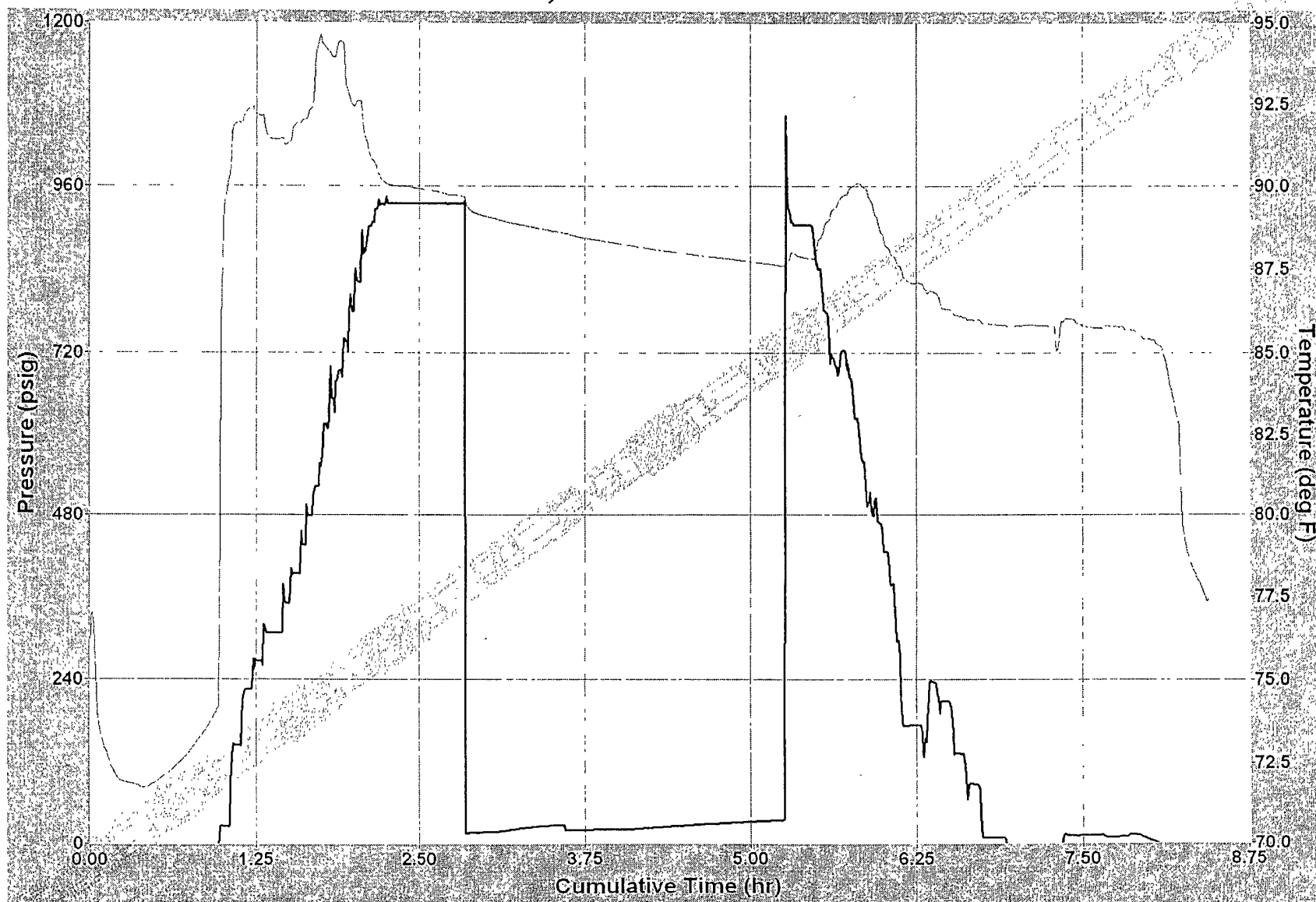
RIG TESTERS, INC. RECORDER# 20234



Company Name WATERFORD OPERATING, LLC
Well Name CRYSTAL DIAMOND #133
Type of Test DST #1 (2075-2140 FT , UPPER SAN ANDRES)
Date(s) of Test 7-10-08



RIG TESTERS, INC. RECORDER# 20794



INCREMENTAL PRESSURE DATA

RECORDER NO : 20234

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 2088 ft

ELAPSED TIME ---MIN---	TOTAL FLOW TIME, T ---MIN---	INCREMENTAL SHUT-IN TIME, DT ---MIN---	(T+DT)/DT (HORNER) -----	PRESSURE ---PSIG---	DELTA P ---PSIG---
FIRST FLOW					
.0	.0			29.40	.00
2.0	2.0			30.01	.61
4.0	4.0			30.40	1.00
6.0	6.0			30.50	1.10
8.0	8.0			30.60	1.20
10.0	10.0			30.81	1.41
12.0	12.0			31.40	2.00
14.0	14.0			31.70	2.30
16.0	16.0			31.70	2.30
FIRST SHUT-IN					
16.0	16.0	.00	.000	31.70	.00
16.5	16.0	.50	32.920	31.79	.09
17.0	16.0	1.00	16.960	31.99	.29
17.5	16.0	1.50	11.640	32.40	.70
18.0	16.0	2.00	8.980	32.68	.98
18.5	16.0	2.50	7.384	33.08	1.38
19.0	16.0	3.00	6.320	33.30	1.60
19.5	16.0	3.50	5.560	33.58	1.88
20.0	16.0	4.00	4.990	33.89	2.19
20.5	16.0	4.50	4.547	34.20	2.50
21.0	16.0	5.00	4.192	34.39	2.69
22.0	16.0	6.00	3.660	35.00	3.30
23.0	16.0	7.00	3.280	35.49	3.79
24.0	16.0	8.00	2.995	35.88	4.18
25.0	16.0	9.00	2.773	36.30	4.60
26.0	16.0	10.00	2.596	36.79	5.09
28.0	16.0	12.00	2.330	37.50	5.80
30.0	16.0	14.00	2.140	38.20	6.50
32.0	16.0	16.00	1.998	38.89	7.19
34.0	16.0	18.00	1.887	39.40	7.70
36.0	16.0	20.00	1.798	39.80	8.10
38.0	16.0	22.00	1.725	40.29	8.59
40.0	16.0	24.00	1.665	40.60	8.90
42.0	16.0	26.00	1.614	41.00	9.30
44.0	16.0	28.02	1.570	41.30	9.60
SECOND FLOW					
45.0	17.0			32.90	.00
47.0	19.0			33.00	.10
49.0	21.0			33.21	.31
51.0	23.0			33.40	.50
53.0	25.0			33.60	.70
55.0	27.0			33.70	.80

INCREMENTAL PRESSURE DATA

RECORDER NO : 20234

RECORDER CAPACITY : 10000 psi

RECORDER DEPTH : 2088 ft

ELAPSED TIME ---MIN---	TOTAL FLOW TIME, T ---MIN---	INCREMENTAL SHUT-IN TIME, DT ---MIN---	(T+DT)/DT (HORNER) -----	PRESSURE ---PSIG---	DELTA P ---PSIG---
SECOND FLOW					
57.0	29.0			33.80	.90
59.0	31.0			33.90	1.00
61.0	33.0			33.91	1.01
63.0	35.0			34.10	1.20
65.0	37.0			34.20	1.30
67.0	39.0			34.30	1.40
69.0	41.0			34.40	1.50
71.0	43.0			34.40	1.50
73.0	45.0			34.50	1.60
74.5	46.4			34.30	1.40
SECOND SHUT-IN					
74.5	46.4	.00	.000	34.30	.00
75.0	46.4	.50	93.880	34.49	.19
75.5	46.4	1.00	47.440	34.69	.39
76.0	46.4	1.50	31.960	34.80	.50
76.5	46.4	2.00	24.220	34.89	.59
77.0	46.4	2.50	19.576	35.09	.79
77.5	46.4	3.00	16.480	35.30	1.00
78.0	46.4	3.50	14.269	35.39	1.09
78.5	46.4	4.00	12.610	35.50	1.20
79.0	46.4	4.50	11.320	35.70	1.40
79.5	46.4	5.00	10.288	35.79	1.49
80.5	46.4	6.00	8.740	36.00	1.70
81.5	46.4	7.00	7.634	36.20	1.90
82.5	46.4	8.00	6.805	36.49	2.19
83.5	46.4	9.00	6.160	36.70	2.40
84.5	46.4	10.00	5.644	37.00	2.70
86.5	46.4	12.00	4.870	37.50	3.20
88.5	46.4	14.00	4.317	37.99	3.69
90.5	46.4	16.00	3.903	38.40	4.10
92.5	46.4	18.00	3.580	38.90	4.60
94.5	46.4	20.00	3.322	39.29	4.99
97.5	46.4	23.00	3.019	39.99	5.69
100.5	46.4	26.00	2.786	40.59	6.29
103.5	46.4	29.00	2.601	41.19	6.89
106.5	46.4	32.00	2.451	41.89	7.59
109.5	46.4	35.00	2.327	42.49	8.19
112.5	46.4	38.00	2.222	43.09	8.79

INCREMENTAL PRESSURE DATA

RECORDER NO : 20234

RECORDER CAPACITY : 10000 psi

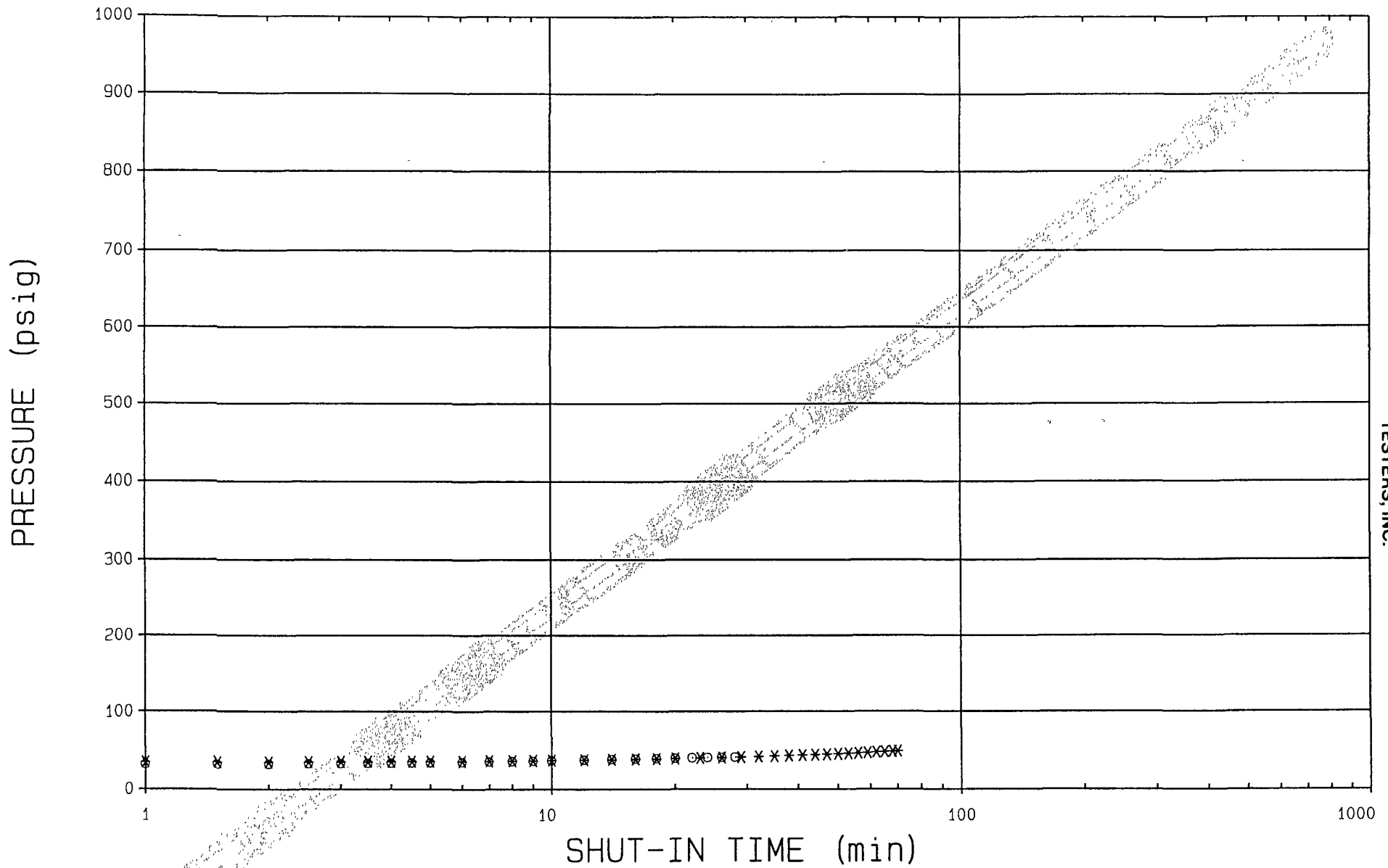
RECORDER DEPTH : 2088 ft

ELAPSED TIME ---MIN---	TOTAL FLOW TIME, T ---MIN---	INCREMENTAL SHUT-IN TIME, DT ---MIN---	(T+DT)/DT (HORNER) -----	PRESSURE ---PSIG---	DELTA P ---PSIG---
SECOND SHUT-IN					
115.5	46.4	41.00	2.133	43.69	9.39
118.5	46.4	44.00	2.055	44.19	9.89
121.5	46.4	47.00	1.988	44.79	10.49
124.5	46.4	50.00	1.929	45.30	11.00
127.5	46.4	53.00	1.876	45.99	11.69
130.5	46.4	56.00	1.829	46.49	12.19
133.5	46.4	59.00	1.787	46.90	12.60
136.5	46.4	62.00	1.749	47.59	13.29
139.5	46.4	65.00	1.714	48.09	13.79
142.5	46.4	68.00	1.683	48.59	14.29
144.5	46.4	70.02	1.663	49.00	14.70

REMARKS

THE INCREMENTAL DATA, PLOTS & ANALYSIS ARE FROM THE ELECTRONIC RECORDER.
PLEASE REFER TO DERIVATIVE DIAGNOSTICS ANALYSIS FOR FURTHER INFORMATION.
(PRESSURE ASCII FILES ARE AVAILABLE E-MAIL OR DISKETTE UPON REQUEST)

PRESSURE TIME



WATERFORD OPERATING, LLC
CRYSTAL DIAMOND # 133

○ FIRST SHUT-IN
* SECOND SHUT-IN



Well Test Report

RigTesters, Inc.
ABILENE - MIDLAND - GRAHAM

WATERFORD OPERATING, LLC CRYSTAL DIAMOND #133

Well identification

Well ID	CRYSTAL D.#133	Well location	N.E. DEXTER
County/District	CHAVES	State, Country	NEW MEXICO
Company	WATERFORD OP.	Division	HOUSTON

Fluid properties

Prod/Inj fluid	OIL	GOR	500:1
Water cut	0%	Condensate yield	UNKNOWN
API gravity	EST. 39.0	Gas spec. grav.	0.675
Viscosity	2.4559 cp	Pseudo-critical T	377.17 deg R
Pseudo-critical P	666.05 psia	H2S mole fraction	UNKNOWN
CO2 mole fraction	UNKNOWN	N2 mole fraction	UNKNOWN
Compressibility(t)	30.864 e-6/psi	Formation vol factor	1.1108 RB/STB

Reservoir properties

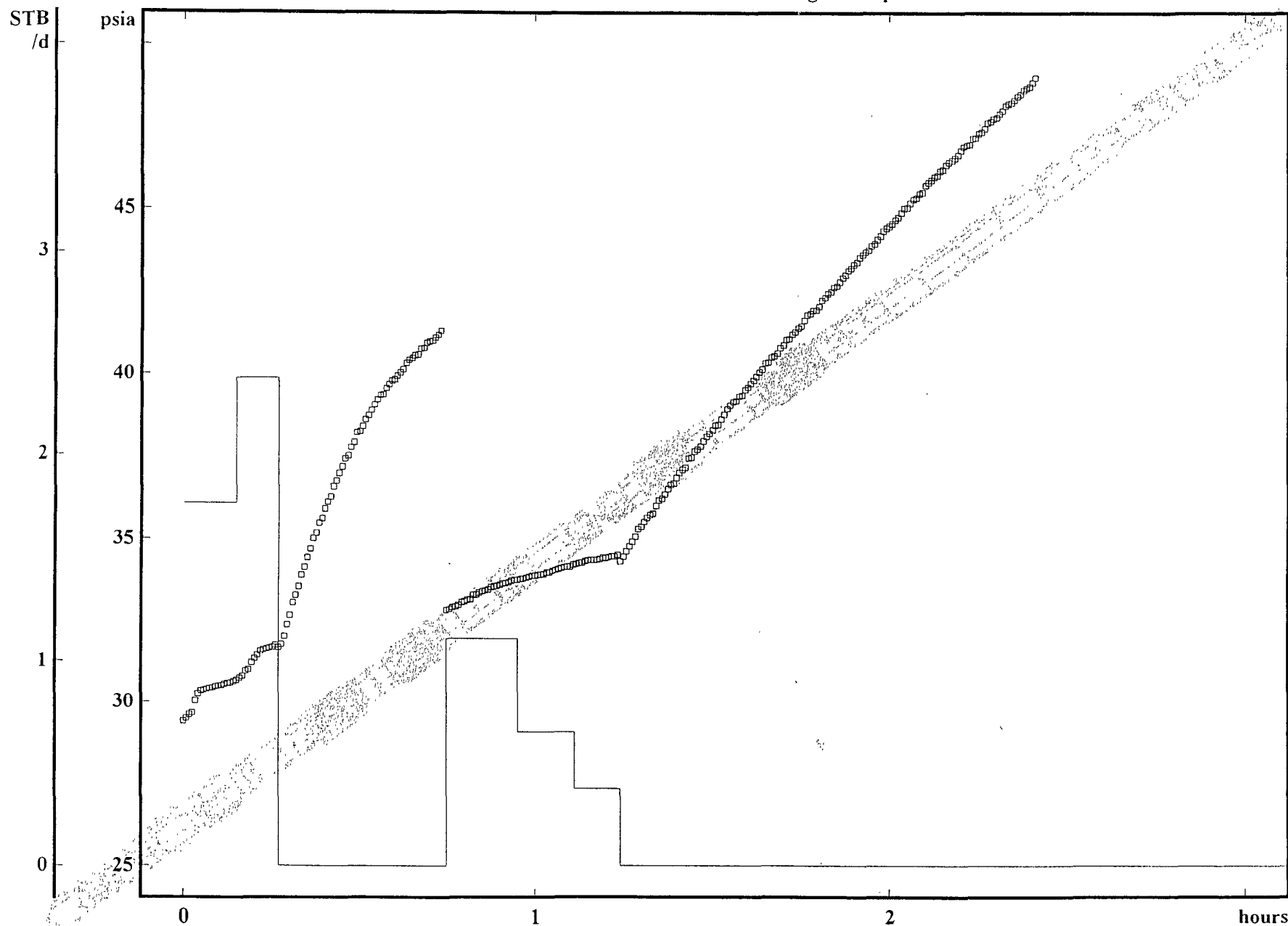
Porosity	0.1 frac	Formation thickness	10 ft
Wellbore radius	0.32813 ft	Prod-observer distance	N/A
Water-Oil Contact	UNKNOWN	Gas-Oil Contact	N/A
Gas-Water Contact	N/A	Rock compressibility	
Reservoir temperature	94 deg F	Pressure for properties	834 psia

Comments

THE DERIVATIVES INDICATE DOMINATION OF WELLBORE STORAGE EFFECT ON BOTH SHUT-IN PERIODS. ANY CALCULATIONS (EXTRAPOLATIONS, PERMEABILITY AND SKIN) UNDER THESE CONDITIONS ARE AMBIGUOUS AND UNRELIABLE. THE FIXED PARAMETERS USED WERE AN EST. 10% POROSITY, 10 FT. OF NET PAY REPORTED AND AN AVERAGE (TIME WEIGHTED) PRODUCTION OF .772 BOPD FOR THE FINAL FLOW PERIOD. THE RATES WERE BASED ON DENSITY OF FLUID RECOVERED VS. FLOWING PRESSURES. * THE OVERALL TEST INDICATES A RESERVOIR WITH LOW POROSITY & VERY LOW PERMEABILITY.

WATERFORD OPERATING, LLC CRYSTAL DIAMOND #133

Pressure and flow rate vs time during test sequence

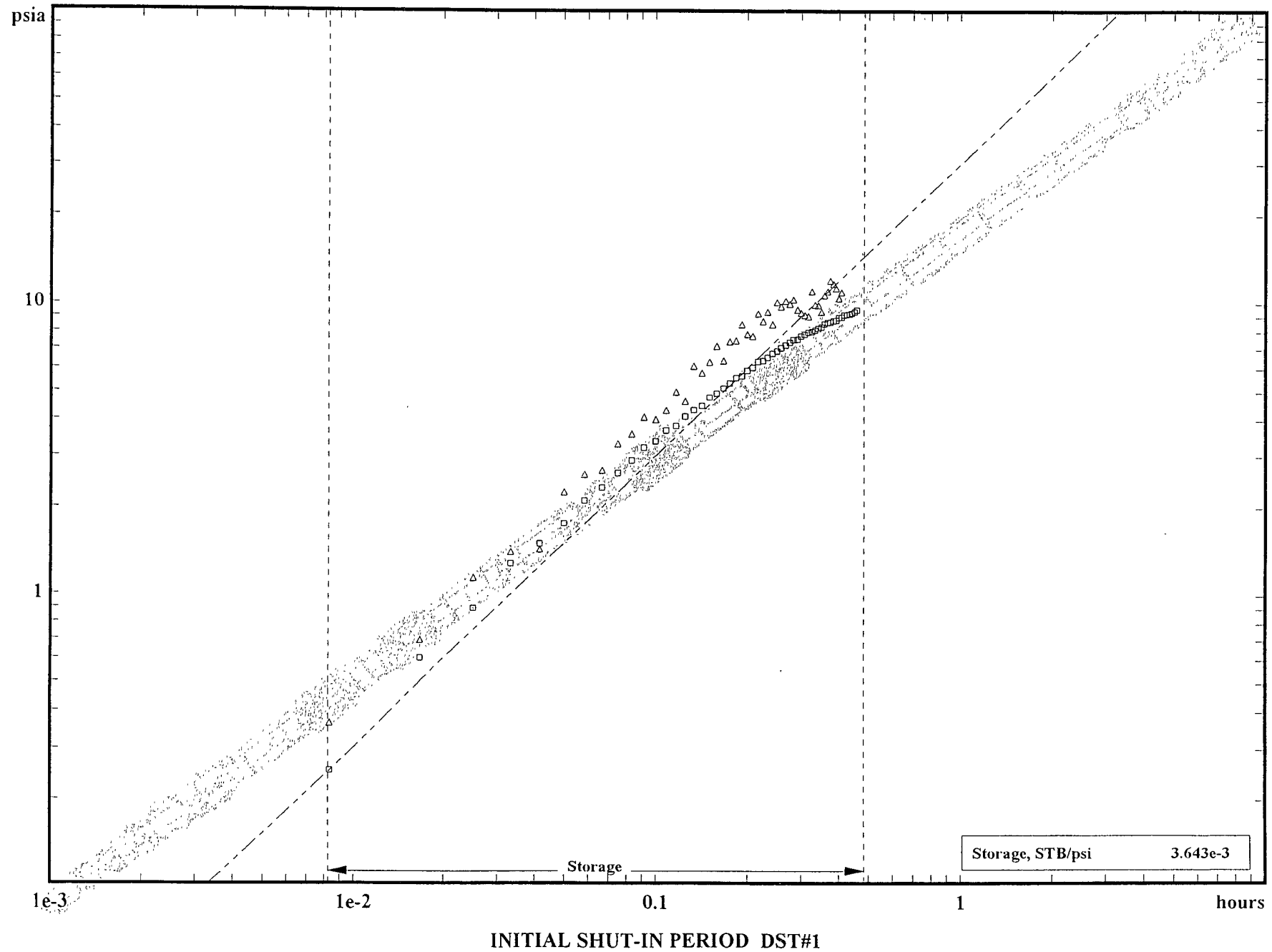


DST #1 2075 - 2140 FT.; UPPER SAN ANDRES



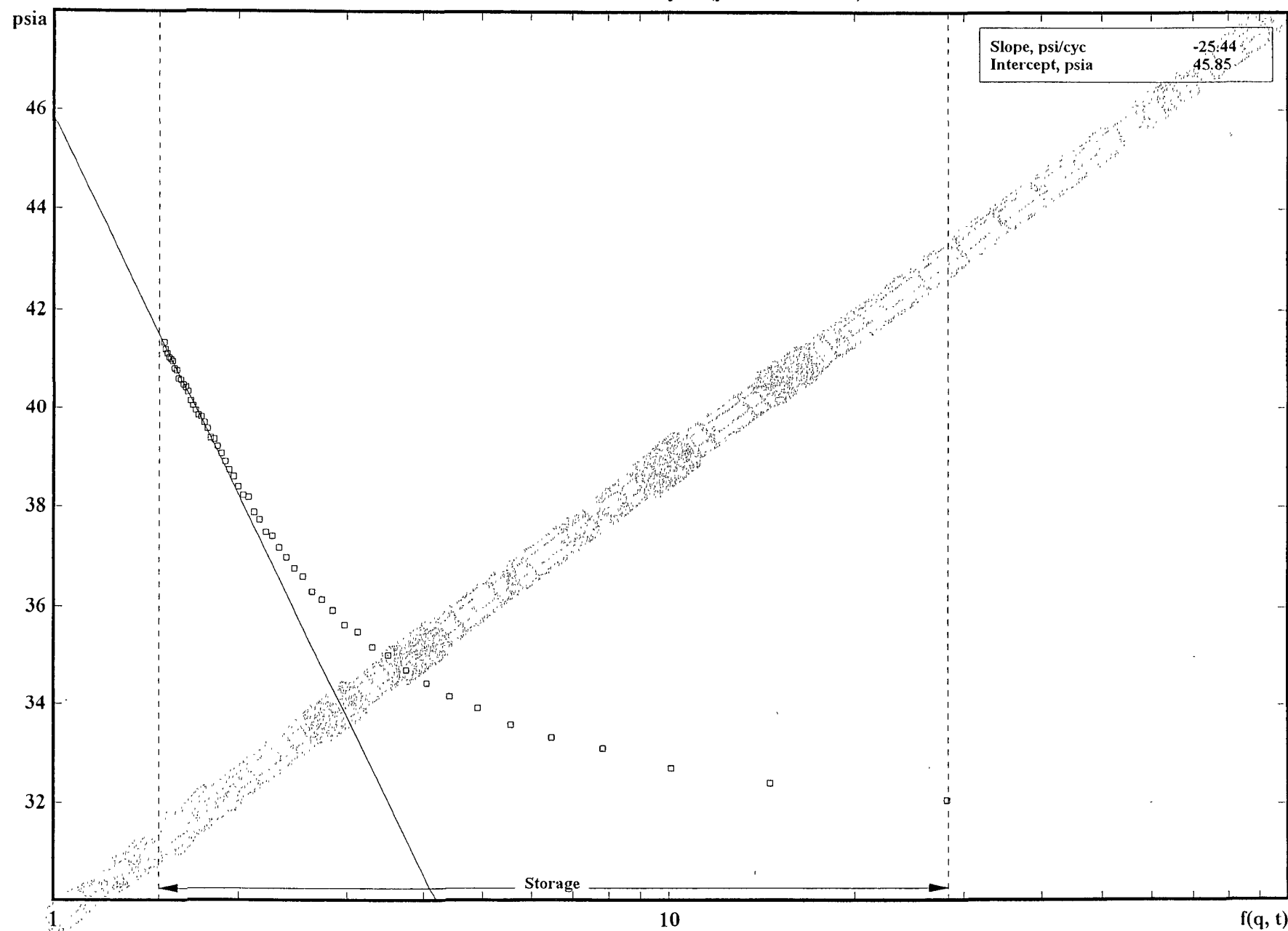
WATERFORD OPERATING, LLC CRYSTAL DIAMOND #133

Diagnostic plot (pressure & time)



WATERFORD OPERATING, LLC CRYSTAL DIAMOND #133

Variable rate Horner plot (pressure & time)

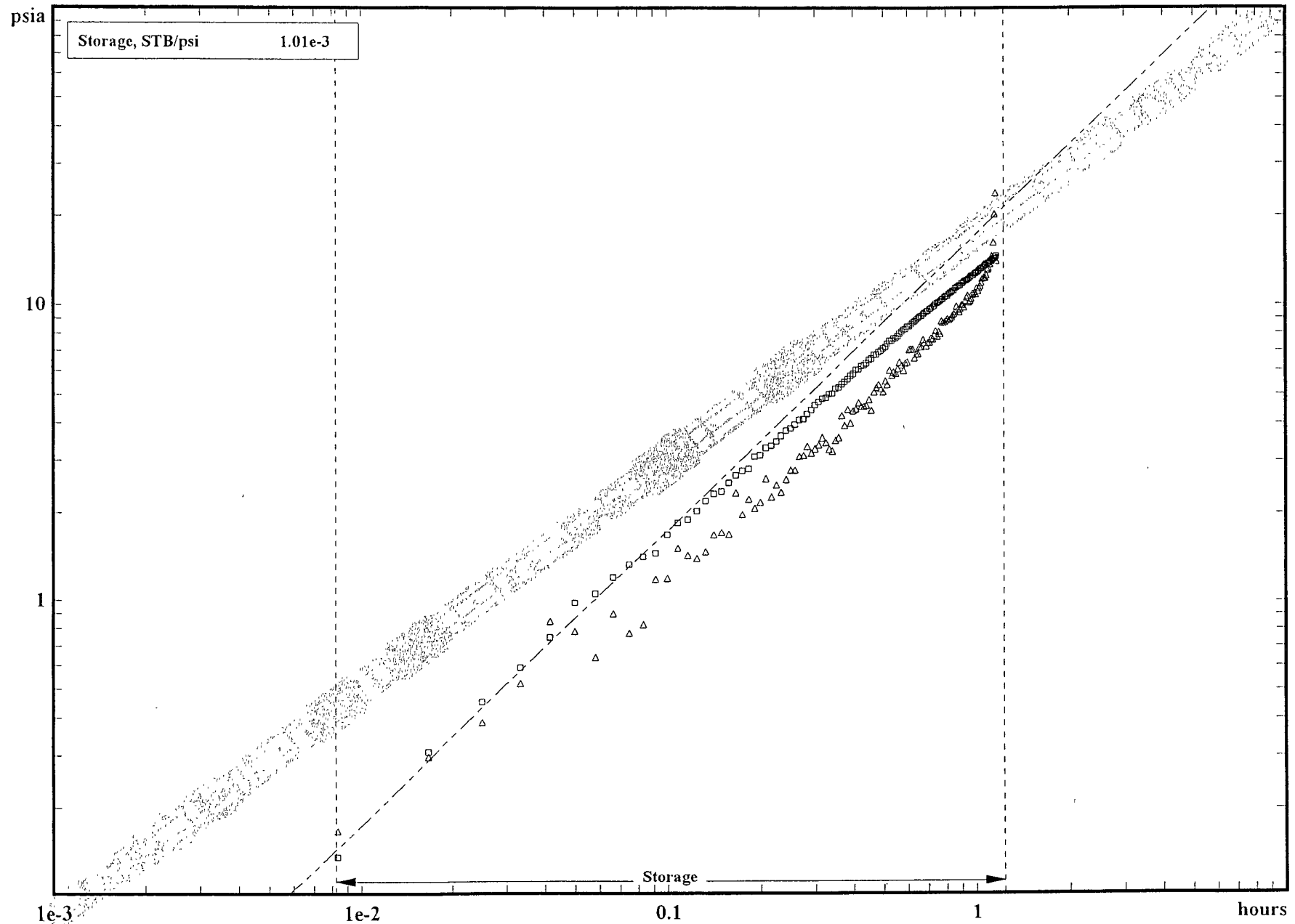


INITIAL SHUT-IN PERIOD DST#1



WATERFORD OPERATING, LLC CRYSTAL DIAMOND #133

Diagnostic plot (pressure & time)

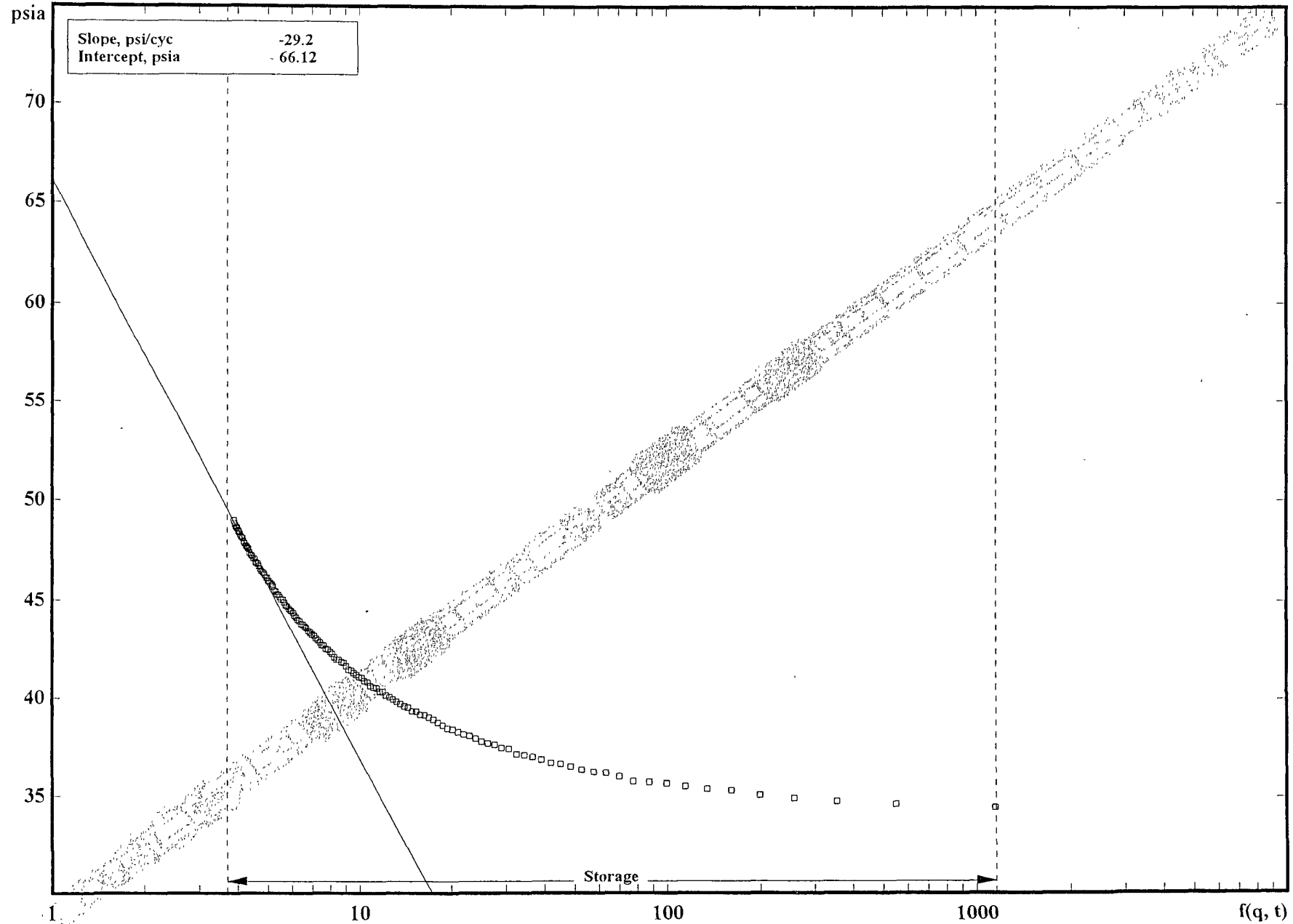


FINAL SHUT-IN PERIOD DST#1



WATERFORD OPERATING, LLC CRYSTAL DIAMOND #133

Variable rate Horner plot (pressure & time)



FINAL SHUT-IN PERIOD DST#1

