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New Mexico
Energy Minerals and Natural Resources Department
Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

Form C-140
Original 11/1/91

Submit Original
Plus 2 Copies
to appropriate
District Office

H-0373 1/2

APPLICATION FOR
QUALIFICATION OF WELL WORKOVER PROJECT
AND CERTIFICATION OF APPROVAL

THREE COPIES OF THIS APPLICATION AND ALL ATTACHMENTS MUST BE FILED WITH THE APPROPRIATE DISTRICT OFFICE OF THE OIL CONSERVATION DIVISION.

- I. Operator: Santa Fe Energy Resources, Inc. OGRID #: 020305
Address: 550 W. Texas, Suite 1330, Midland, Texas 79701
Contact Party: Gary Travis Phone: 915/687-3551
- II. Name of Well: Falcon "32" State #1 API #: 30-025-33001
Location of Well: Unit Letter F, 2080 Feet from the North line and 1650 feet from the West line.
Section 32, Township 23S, Range 32E, NMPM, Lea County
- III. Date Workover Procedures Commenced: Sept. 10, 1996
Date Workover Procedures were Completed: Sept. 21, 1996
- IV. Attach a description of the Workover Procedures undertaken to increase the production from the Well.
- V. Attach an estimate of the production rate of the Well (a production decline curve or other acceptable method, and table showing monthly oil and/or gas Project Production based on at least twelve (12) months of established production which shows the future rate of production based on well performance prior to performing Workover.)
- VI. Pool(s) on which Production Projection is based:
West Triste Draw Delaware
- VII. AFFIDAVIT:
State of Texas)
County of Midland) ss.

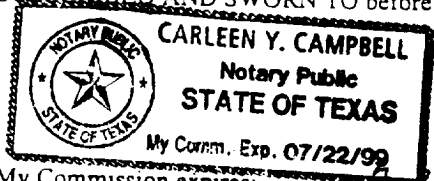
Gary Travis, being first duly sworn, upon oath states:

1. I am the Operator or authorized representative of the Operator of the above referenced Well.
2. I have made, or caused to be made, a diligent search of the production records which are reasonably available and contain information relevant to the production history of this Well.
3. To the best of my knowledge, the data used to prepare the Production Projection for this Well is complete and accurate and this projection was prepared using sound petroleum engineering principles.

(Name)

Sr. Reservoir/Evaluations Engineer
(Title)

SUBSCRIBED AND SWORN TO before me this 28 day of Aug., 1997



Notary Public

Carleen Y. Campbell

My Commission expires: 7-22-99

FOR OIL CONSERVATION DIVISION USE ONLY:

VIII. CERTIFICATION OF APPROVAL:

This Application for Qualification of Well Workover Project is hereby approved and the above referenced Well is designated as a Well Workover Project pursuant to the "Natural Gas and Crude Oil Production Incentive Act" (Laws 1995, Chapter 15, Sections 1 through 8). The Oil Conservation Division hereby verifies the Production Projection for the Well Workover Project attached to this application. By copy of this Application and Certification of Approval, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project has been completed as of 9-21-96 1996.

[Signature]
District Supervisor, District 1
Oil Conservation Division

Date: 10/3/97

IX. DATE OF NOTIFICATION TO THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT:

DATE: _____

WORKOVER PROCEDURE

FALCON "32" STATE #1 DELAWARE UPPER BRUSHY CANYON COMPLETION

The Falcon "32" State #1 was originally completed in the Delaware Lower Brushy Canyon (8400-8414') in October, 1995. In September, 1996 the Lower Brushy Canyon was temporarily abandoned and the Delaware Upper Brushy Canyon was completed. The following is an outline of the completion procedure.

1. Rig-up workover unit. Pull out of hole with rods and tubing.
2. Perforate the Upper Brushy Canyon from 7348-55' and 7360-66'.
3. Trip in hole with RBP, pkr and tubing. Set RBP at 7601' and test. Set pkr at 7246'.
4. Break down perfs with 2 bbl of acid. Re-acidize with 1000 gal. of acid. Swab back and evaluate.
5. Fracture stimulate and swab/flow back load.
6. Place well on pump.

UPPER BRUSHY CANYON ADDITION
FALCON "32" ST. #1
AFE # 296223

OBJECTIVE: Upper Brush Canyon "Livingston Ridge" Pay Addition.

DIRECTIONS: From Hwy 128 , between MM 18 & 19, turn north at white cattleguard onto lease road. Continue N/E for 2 miles and turn left and go 1/4 mile to the location.

WELL DATA:

Reference elevation: KB 3671' (13' AGL)

Correlation log: Schlumberger CNL-GR (9/13/95)

Casing: 13 3/8" 48# H-40 @ 605' cmtd w/625 sx Cl C to surf
8 5/8" 32# K-55 @ 4777' cmtd w/1300 sx Lite + 200 sx Cl C to surf
5 1/2" 15.5# & 17# K-55 @ 8,615' cmtd w/450 sx Cl H
35' jt @ 8025'.

TD: 10,000'

PBTD: 8,525'.

Tubing: 2 7/8" 6.5# N-80 @ 8403' w/TA @ 8264'.

Rods: 6-1", 155-3/4", 91-7/8", & 79-1" Gr D rods w/2 1/2"x 1 1/2"x 22' pump.

Curr Perfs: 8400-14'

PROCEDURE

1. MIRU PU. POOH w/rods & pump.
2. ND WH & NU BOP.
3. Release TA & POOH w/2 7/8" 6.5# N-80 tbg.
4. RU WL & RIH w/4" csg gun & perf 2 SPF from 7348-55, & 7360-66' (28 shots). RD WL.
5. RIH w/RBP, pkr, & 2 7/8" tbg to 7600'. Set RBP. Load hole w/formation water, set pkr, & test RBP to 2000 psi.
6. Rel pkr & PU to 7370'.
7. MIRU Nowasco. Spot 2 bbls 7.5% NEFE across perfs. PU to 7250'. ND BOP & NU frac valve. Set pkr & estab PIR w/2% KCl. Circ acid to pkr, trap 1000 psi on backside, and acidize zone w/1000 gals 7.5% NEFE at 3-5 BPM dropping 42 1.3 sg ball sealers evenly spaced. SD & record 15 min SIP.

8. RU swab & swab test zone for oil cut.
9. Rel pkr & RIH thru perfs to clear balls. PU & reset pkr @ 7250'. NU frac valve.
10. Frac down tbg @ 10 BPM w/16/30 Ottawa & RC as per Nowasco recommendation. Flush to top perf w/2% KCl. Max pressure 6000 psi on tbg.
11. Record ISIP and flow well back immediately at 20 GPM to closure. RD BJ. Continue flowing back to tank at 1 BPM until well dies.
12. When well dies, ND frac valve & rel pkr & POOH w/tbg & pkr.
13. RIH w/retrieving tool & 2 7/8" tbg to RBP. Rev out any sand & latch onto RBP, release, & POOH w/tbg & RBP.
14. RIH w/notched collar, 1 jt tbg, SN, 36 jts tbg, TA, and 2 7/8" tbg to $\pm 7320'$. Set TA. ND BOP & NU WH.
15. RIH w/2 1/2" x 1 1/2" x 26' RHBC pump, 133-3/4", 76-7/8", & 76-1" Gr. D rods. Space out and hang well on @ 10x120" SPM. RDMO PU.

SFER, NC. (SFEOP,LP)	SFE WI	: 49.0625	% APO	Rig:	Pride #1546
<u>Falcon "32" State No. 1 (E)</u>	SFE NRI	: 40.895	% BPO	Spud	8/28/96
2080' FNL & 1650' FWL	SFE NRI	: 40.686	% APO	13-3/8"	@ 605'
Sec 32-23S-32E	SFE ORRI	: N/A	% BPO	8-5/8"	@ 4,777'
Lea Co., NM	SFE ORRI	: N/A	% APO	5-1/2"	@ 10,000'
Prospect: Falcon	SFE WI	: N/A	% BCP	Perfs:	8400-8414'
PTD: 10,100' Bone Spring	SFE WI	: N/A	% ACP		
	SFE ACT	: 4934-001			
	SFE AFE	: 296223			
	AFE COMP	: \$21,501			
	DHC COST	: N/A			

9/10/96

RU, kill well w/60 bbl prod wtr. POOH w/rods & pmp, NU BOP, TOO H w/tbg. SWI, SDFN.
CTD: \$2,541

9/11/96

RU Computalog, correl & perf 2 SPF: 7348 - 7355' and 7360-7366', all shots fired. TIH w/Uni VI RBP & Uni V pkr to 7601'. Set RBP, PU to 7570', set pkr, load tbg, test to 2000#, ok. Rel pkr, PU to 7372'. SWI, SDFN.
CTD: \$7,510

9/12/96

RU BJ, spot 2 bbl 7.5% NeFe across perfs. PU to 7246', set pkr. Brk dwn perfs @ 1540#. PIR = 3.8 BPM @ 900#. Circ acid to pkr, acidz zone w/1000 gal 7.5% NeFe & 42 ball sealers. Min press = 1000# @ 5 BPM. Avg press = 1350# @ 5 BPM. Max press = 3860# (ball out @ 28 balls on). Surge off balls, resume 5 BPM @ 1300#, ball out @ 36 balls on, surge off & resume 5 BPM @ 1330#. ISIP 490#. 15 mins 280#. RD BJ, made 8 swab runs for total of 60 BW & swabbed dry. Waited 1 hr, had 200' fluid entry & 10% oil cut. SWI, SDFN. BLLTR 49.
CTD: \$ 3,617

9/13/96

SITP 400#. Open tbg, flowback 5 BO, well died. RIH w/swab line, tag fluid @ 3400'. Swabbed tbg dry for total of 8 BO, 22 BW. Fluid entry = 2 BPH @ 25% oil cut. BLLTR 27. SWI, SDFN.
CTD: \$15,003

9/14/96

Rel pkr, sweep perfs, set pkr @ 7,247'. RU BJ, frac dwn tbg @ 10 BPM w/34,000# 16/30 Ottawa & 12,000# 16/30 RC sd. Screen out w/27,000# Ottawa in form. Avg press 1640#. Max press 7800#. Flush out pmps, rev circ sd out of tbg, well dead. Rel pkr, POOH w/7 stds, tbg started flowing, csg dead. Set pkr, flow to frac tank, 2 hrs well dead. Attempt POOH, pkr wouldn't rel, rev circ thru bypass & rel pkr. POOH w/60 stds, SWI, SDFN.
CTD: \$33,823

9/15/96

POOH w/tbg, LD pkr. RIH w/retrvg tool, tag sand @ 7260'. Rev circ to RBP, circ clean, latched onto RBP, RBP wouldn't rel. Could not unlatch retrvg tool. SWI, SDFN.
CTD: \$39,189

9/16/96 SD Sunday.

9/17/96

RU WL, tag TD @ 7581'. Chem cut tbg @ 7556'. POOH w/tbg. RIH w/NC, SN, 10 jts tbg, TA, 221 jts tbg. ND BOP, NU WH, SWI, SDFN. SD @ 7,253'.
CTD: \$45,408

9/18/96

Made 36 swab runs, IFL 100', FFL 1500'. Rec 19 BO, 325 BW. SDFN. BLLTR 475.
CTD: \$47,576

9/19/96

SITP 500#. IFL 1400'. Made 11 swab runs, FFL 1500'. 24 BO, 171 BW, 20 MCF. SWI, SDFN. BLLTR 304.
CTD: \$49,744

9/20/96

SITP 250#. Open choke, well flowed 2 hrs @ 30# FTP. Made 6 swab runs, well flowed 1-2 hrs after each run. IFL 1000'. FFL 1400'. SDFN, well flowing to batt @ 24/64" choke, 40# FTP. Rec 24 BO, 140 BW, 50 MCF. BLLTR 164.
CTD: \$51,424

9/21/96

TP 0. Flowed 42 bbl fluid overnight, IFL 800'. Made 4 swab runs, well flowed 2-3 hrs after each run. FFL 1400'. Left well flowing to batt. SDFN. Rec 25 BO, 110 BW, 50 MCF. BLLTR 54.
CTD: \$53,104

9/22/96

TP 20. RIH w/equip as follows:

(1) Sand Screen	(1) 2-7/8"x1 1/2"x22' Pump
(1) 1"x2' Sub	(1) R/B Tool
(6) 1" Rods	(138) 3/4" Rods
(76) 7/8" Rods	(70) 1" Rods
(1) 1"x1" Sub	(1) 8"x1" Sub
(1) 4"x1" Sub	

Hung well on. Load tbg, test ok, good pmp action. RD. Well on production. LD:

(42) 3/4" D-90 rods	(11) 7/8" D-90 rods	(6) 1" D-90 rods
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9/22/96 Production: Casing Flowing. 154 BO, 389 BW, 035 MCF.

CTD: \$54,889

9/24/96 135 BO, 140 BW, 072 MCF.

9/25/96: 131 BO, 223 BW, 075 MCF. 9/26/96: FL 31 jts f/surface, 970'.

9/26/96 132 BO, 170 BW, 076 MCF. FL 60 jts f/surface, 5746' above SN.

9/27/96 24 hr prod: 80 Gas, 156 BO, 162 BW.

9/28/96 24 hr prod: 79 Gas, 138 BO, 155 BW.

9/29/96 24 hr prod: 78 Gas, 127 BO, 144 BW.

9/30/96 24 hr prod: 78 Gas, 149 BO, 150 BW.

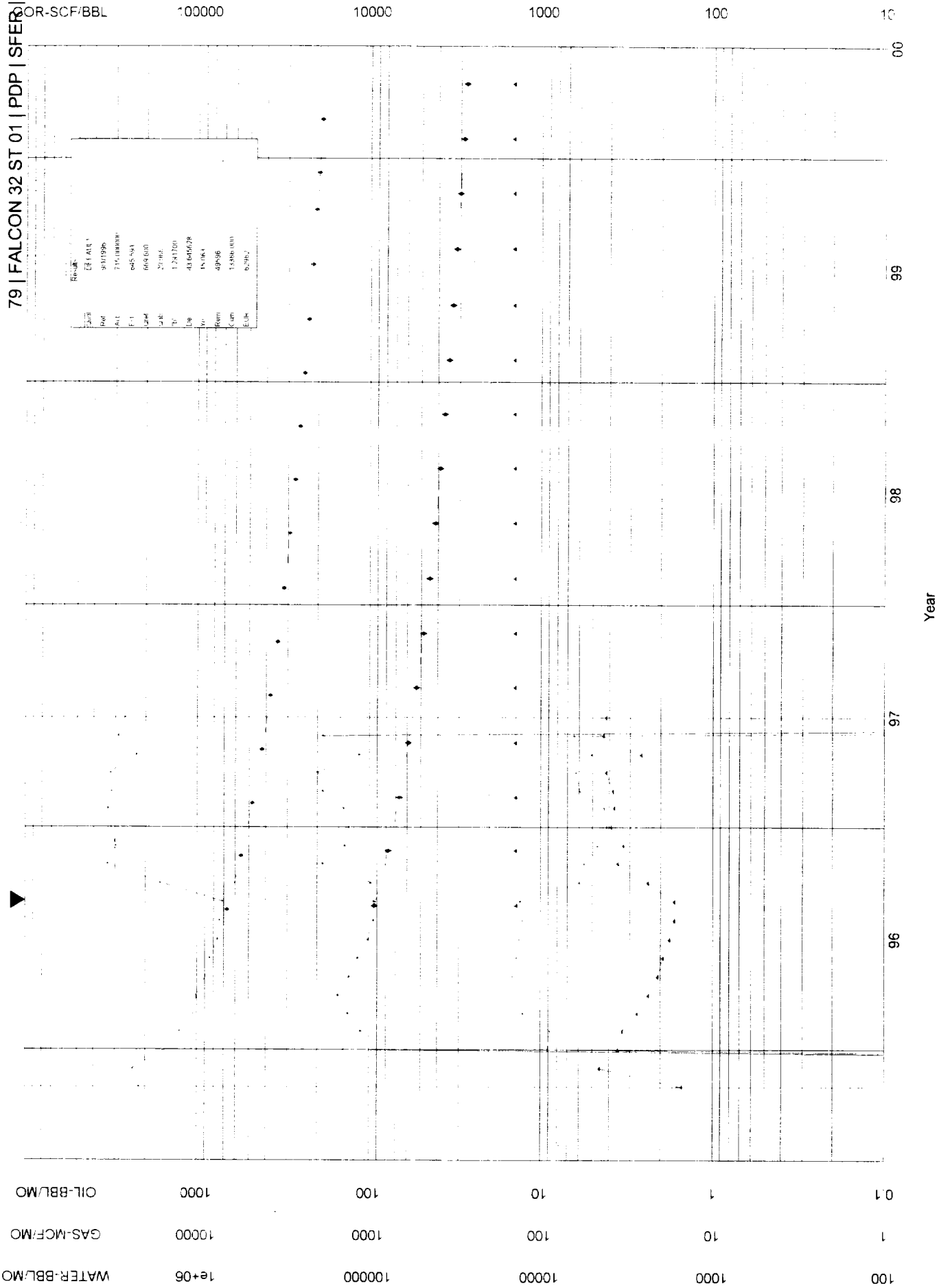
10/01/96

IP test for current workover: 9/27/96 24 hrs prod: 80 Gas, 156 BO, 162 BW Final Report. DROP FROM REPORT.

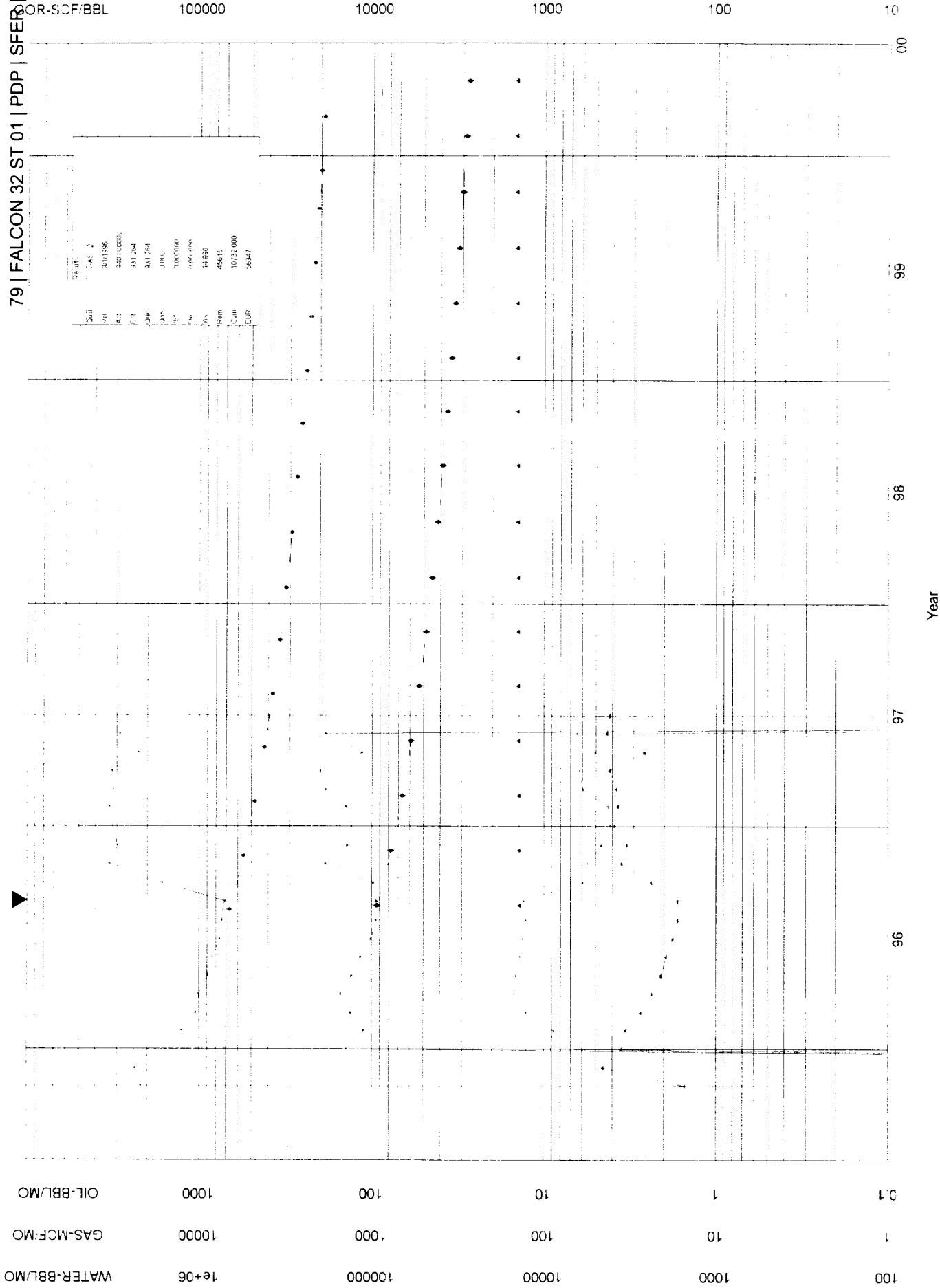
DELAWARE LOWER BRUSHY CANYON PRODUCTION

MO-YEAR	OIL	GAS		OIL	GAS
	MBO	MMCF		MBC	MMCF
Oct-95	2184	0			
Nov-95	2362	207	Year	2000	
Dec-95	1547	1411	Jan.	135	190
Jan-96	1266	1114	Feb.	130	183
Feb-96	1048	1329	Mar.	126	177
Mar-96	1009	1516	Apr.	121	171
Apr-96	895	1307	May	117	165
May-96	842	1161	Jun.	113	159
Jun-96	760	1012	Jul.	109	153
Jul-96	741	942	Aug.	105	148
Aug-96	715	940	Sep.	101	143
			Oct.	98	138
			Nov.	94	133
			Dec.	91	128
				2001	
Sep-96	647	898	Jan.	88	123
Oct-96	606	843	Feb.	85	119
Nov-96	571	795	Mar.	82	115
Dec-96	540	752	Apr.	79	111
	1997		May	76	107
Jan.	513	715	Jun.	73	103
Feb.	488	682	Jul.	71	100
Mar.	466	652	Aug.	68	96
Apr.	446	625	Sep.	66	93
May	429	601	Oct.	64	89
Jun.	412	579	Nov.	61	86
Jul.	397	558	Dec.	59	83
Aug.	383	539		2002	
Sep.	369	519	Jan.	57	80
Oct.	356	501	Feb.	55	77
Nov.	343	483	Mar.	53	75
Dec.	331	466	Apr.	51	72
	1998		May	49	70
Jan.	320	450	Jun.	48	67
Feb.	308	434	Jul.	46	65
Mar.	297	419	Aug.	44	62
Apr.	287	404	Sep.	43	60
May	277	390	Oct.	41	58
Jun.	267	376	Nov.	40	56
Jul.	258	363	Dec.	38	54
Aug.	249	350		2003	
Sep.	240	337	Jan.	37	52
Oct.	231	326	Feb.	36	50
Nov.	223	314	Mar.	35	49
Dec.	215	303	Apr.	33	47
	1999		May	32	45
Jan.	208	292	Jun.	31	44
Feb.	200	282	Jul.	30	42
Mar.	193	272	Aug.	25	35
Apr.	187	262	Sep.	20	28
May	180	253	Oct.	15	21
Jun.	174	244	Nov.	10	14
Jul.	167	236	Dec.	5	7
Aug.	162	227		2004	
Sep.	156	219	Jan.	0	0
Oct.	150	212			
Nov.	145	204			
Dec.	140	197			

OIL



GAS



GAS

WATER-BBL/MO
100000
10000
1000
100
10
1
0.1

GAS-MCF/MO
10000
1000
100
10
1
0.1

OIL-BBL/MO
10000
1000
100
10
1
0.1

79 | FALCON 32 ST 01 | PDP | SFER |

