

District I # (505) 393-6161
1625 N. French Dr, Hobbs, NM 88240
District II # (505) 748-1283
1301 W. Grand Avenue, Artesia, NM 88210
District III # (505) 334-6178
1000 Rio Brazos Road, Aztec, NM 87410
District IV # (505) 476-3440
1220 So. St. Francis Dr., Santa Fe, NM 87505

New Mexico
Energy Minerals and Natural Resources Department

Form C-140
Revised June 10, 2003

**SUBMIT ORIGINAL
PLUS 2 COPIES
TO APPROPRIATE
DISTRICT OFFICE**

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505 *H-05-00015*
(505) 476-3440

APPLICATION FOR
WELL WORKOVER PROJECT

I. Operator and Well

Operator name & address HENRY PETROLEUM LP 3525 ANDREWS HIGHWAY, MIDLAND, TX 79703							OGRID Number 155453	
Contact Party SHIRLEY HOUCHINS							Phone (432)694-3000	
Property Name STATE Y					Well Number 5		API Number 30-025-11773	
UL B	Section 25	Township 25S	Range 37E	Feet From The 990	North/South Line N	Feet From The 2308	East/West Line E	County LEA

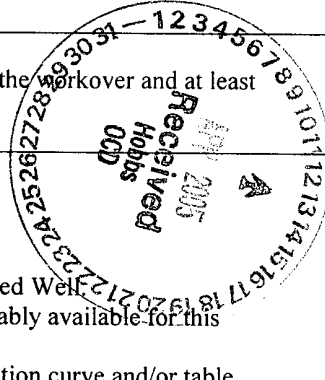

II. Workover

Date Workover Commenced: 04/17/2004	Previous Producing Pool(s) (Prior to Workover): FORMERLY SOUTH JUSTIS UNIT G-230, JUSTIS BLINRBRY, TUBB, DRINKARD PRODUCER & INJECTOR
Date Workover Completed: 05/02/2004	

III. Attach a description of the Workover Procedures performed to increase production.

IV. Attach a production decline curve or table showing at least twelve months of production prior to the workover and at least three months of production following the workover reflecting a positive production increase.

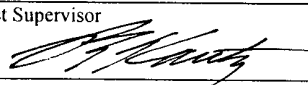
V. AFFIDAVIT:

State of <u>TEXAS</u>)) ss. County of <u>MIDLAND</u>) <u>SHIRLEY HOUCHINS</u> , 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 reasonably available for this Well. 3. To the best of my knowledge, this application and the data used to prepare the production curve and/or table for this Well are complete and accurate.		
Signature <u>Shirley Houchins</u> Title <u>REGULATORY SPECIALIST</u> Date <u>4-11-2005</u>		
E-mail Address <u>shirley@henrypetroleum.com</u>		
SUBSCRIBED AND SWORN TO before me this <u>11th</u> day of <u>April</u> , 20 <u>05</u> .		
		Notary Public <u>Heather K. Farris</u>

FOR OIL CONSERVATION DIVISION USE ONLY:

VI. CERTIFICATION OF APPROVAL:

This Application is hereby approved and the above-referenced well is designated a Well Workover Project and the Division hereby verifies the data shows a positive production increase. By copy hereof, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project was completed on 5/27, 2005.

Signature District Supervisor 	OCD District <u>1</u>	Date <u>4/14/05</u>
--	--------------------------	------------------------

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

SOUTH JUSTIS UNIT "G" #230

LOCATION: 990' FNL & 2308' FEL (B), SEC. 25, T-25S, R-37E
LEA COUNTY, NEW MEXICO
FORMER OPERATOR: ARCO OIL AND GAS COMPANY
FORMER WELL NAME: STATE "Y" #5
BLM TRACT NUMBER: 31 **API NUMBER:** 3002511773
SPUD DATE: 1/26/59

KB: 3075' GL: TD: 6872' PBD: 6789'

CASING RECORD:

Size	Wt	Grade	Depth	Cementing Record
13-3/8"	48	H-40	600'	600 sxs cmt, circ
9-5/8"	36/32/3	H-40	3329'	900 sxs cmt, (TOC @ 685 - TS)
7"	20/23/26	J-55/N-80	6871'	430 sxs cmt
(TOC @ 3175' - TS)				

LOGS:

Date	Company	Log Name
2/25/59	Schlumberger	GR-N, ML

DST's:

1	6785-6822	Fusselman	Op. 1', Gas 5", Oil 16"; F. 10 BO 44", RO 15 BO, 30"/2025
---	-----------	-----------	--

INITIAL COMPLETION: 3/2/59 IP 367 BOPD, A/1000, perms 6798-6838'
IP 183 BOPD, MA/1000, perms 5870-96'

TREATMENTS AND WORKOVERS

01/62	Perf'd 5732-46, 60-84, 5795-5802; A
07/76	Squeezed all perms in Drinkard & Fusselman, fuss model D pkr @ 6825', cmt ret @ 6789' sqz perms below & clean out to 6789'
07/76	Perf'd 6766-6780' (Fuss), acid spot 100 gal acetic + 500 gal 15% HCL, IP 100 BOPD (swbg) Est. WOC @ 3730'
08/86	1000 gal 15% acid before acid 12 BO after acid 18 BO.
11/93	Set CIBP @ 6100' and dumped 35' cmt on top -- new PBD = 6065'. Pressure tested 7" casing from 5041-surface to 500#. Perf Blinbry-Tubb/Drinkard from 5082'-5978' (76' @ 2 SPF - 152 perms). Acidized 5082'-5978' in 3 stages -- 5082'-5281' w/4,200 gals; 5306'-5622' w/6,600 gals; and 5640'-5978' w/4,400 gals.
12/93	Set injection tubing and packer @ 5015'.
9/97	Set CIBP @ 5546'. Add Blinbry perms from 4969'-5061' (27 selections @ 2 SPF = 54 holes). Acidize new and existing perms located above CIBP (4969'-5531') with 3600 gallons of 15% NEFE HCL acid using the PPI tool for diversion.
12/97 3/03	Set CIBP @ 5430' to stop channel down and around existing CIBP @ 5546. RTP in the LTD.

SOUTH JUSTIS UNIT "G" #230

2-2004 Workover Procedure

1. Obtain regulatory C-103 approval to convert this well back to a Fusselman producer from a unit producer. Also, obtain WI owner permission to take wellbore out of the unit for P&A costs.
2. MIRU PU. POOH with rods and pump. ND WH. Release TAC. NU BOP. POOH with tubing.
3. PU & strap in the hole with 2 3/8" L-80 tubing (for running liner because of extra weight), 4 1/2" drill collars and 6 1/8" cone buster mill. TIH to 5430' and drill out CIBP, TIH to 5546' and drill out CIBP, TIH to 6065 and drill out cement and CIBP (watch for pressure since the Fusselman was last produced in 1993). TIH to old PBTD of 6789'.
4. POOH with bit and PU scraper, make bit and scraper run to PBTD of 6789' **this is important** to ensure good scab liner packer setting in old 7" casing. Be sure to reverse circulate the hole clean.
5. POOH with bit and scraper, TIH with tubing and acidizing packer and RBP to 6789' and set the RBP below the Fusselman perms (6766-6780') then set the packer at 6740' and acidize the Fusselman perms with 1000 gal 15% NEFE HCL at 1-2 BPM, 23 bbls and flush (they squeezed lower perms to eliminate water production in 1976 & offsets produce high water volumes), do not exceed 1000 psi. Flush acid to top perf with (2 3/8" tubing vol = .00387 bbl/ft, 7" casing vol = .0393 bbl/ft) 25 bbls produced water with bactericide mixed in. Perform acid sludge testing using a sample of the Arnot Ramsay F #8 Fusselman oil prior to mixing acid. Ramsay #8 treated on a vacuum 2-6-04.
6. Swab load back. Report results on morning report.
7. Release packer & TIH to PU RBP, POOH to ~ 6620' and set RBP, POOH to 6570' and set packer. Pressure test lower scab liner packer seat interval to 500 psi. POOH with RBP & packer to 4820', set packer and test backside to 500 psi for upper packer casing integrity test. POOH with RBP & packer.
8. Place well on pump below a packer with the following rod design for ~ 160 + BFPD using the 640 PU currently on the SJU G-230, design has rod loading of 93%, PU loading of 81%:

100	7/8" X 25' D rods	2500.00'
170	3/4" X 25' D rods	4250.00'
	2" X 1-1/2" X 20' pump	20.00'
		<u>6770.00'</u>
9. Set 7" packer @ ~ 6700'. Production test for 2 weeks reporting results to the office.
10. Set 7" TAC @ ~ 6755' in 7" casing using 15 points to set it, with SS on/off tool directly above TAC and SN @ ~ 6750'. Get off of on/off tool and POOH.
11. RU to run scab liner. PU scab liner packer (SLP) assembly consisting of the following:
 - Muleshoe sub
 - Nickel-plated lower packer with 4-1/2 LTC box looking up
 - ±1800' of 4-1/2" J-55 11.6 ppf LTC scab liner w/ Ryt-wrap on OD (verify Ryt-Wrap has cured @ least 1 week before running)
 - Nickel-plated upper packer with 4-1/2" LTC pin looking down

NOTES:

- Verify both packer assemblies, and muleshoe drift 3.875".

SOUTH JUSTIS UNIT "G" #230

- Drift the 4-1/2" 11.6 ppf LTC J-55 scab liner to 3.875".
 - Use Ryt-Wrap touch-up kit to repair any damaged or missing coating on the liner OD.
 - Use Best-o-Life 2000 API modified pipe dope on all connections.
 - Have proper handling tools on location to reduce the risk of damaging pipe threads and/or pipe body. Have catwalk on location and pipe rack padded to minimize damage to Ryt-Wrapped pipe.
 - Calibrate tongs before running liner to ensure proper make-up torque.
 - Optimum make-up torque for 4-1/2" 11.6 ppf J-55 is 1620 ft-lbs, Max is 2025 ft-lbs.
 - Witness the unloading of the liner from the truck to the pipe racks to insure the liner is properly handled.
12. PU SLP running tool. Verify with Weatherford representative that the running tool has an O-ring sub to test the top packer after it is set. RIH with SLP assembly, twelve (12) 4-1/2" DC, and 2-3/8" L-80 workstring. Locate top packer at $\pm 4800'$ and bottom packer at $\pm 6600'$. **The bottom packer must be set between 6581' and 6613' between collars using the 2-27-59 Worth Well Surveys "Simultaneous Radioactivity Log" with collars. This bottom packer set depth interval should allow the top set depth to be between collars from 4780' and 4811'.** **NOTE:** Limit running speed while RIH with SLP assembly as packers set in compression. If the SLP un-Jays at any time going in the hole, PU on the running string and rotate $\frac{1}{4}$ to $\frac{1}{2}$ turn to the left to re-Jay, being careful not to release the running tool.
13. Set the packer by rotating the running string to the right $\frac{1}{4}$ turn at the packer while in neutral weight to un-Jay the slips. SO to set lower packer. Continue to SO to set upper packer. At least 18 – 20 kips compression are required to fully energize the packing elements. Test the backside to 500 psi to verify the top packer is set.
14. After energizing the packers, PU to neutral weight at the top packer. Work left-hand torque to the running tool to release it from the SLP. POOH and LD DC and running tool. **NOTE: Do not pull tension in the SLP system any time after it is set. This could move the packers uphole and roll the packing elements.**
15. Place well on pump with the following rod design for ~ 160 + BFPD using the 640 PU currently on the SJU G-230, design has rod loading of 93%, PU loading of 81%:
- | | | |
|-----|------------------------|---------------|
| 100 | 7/8" X 25' D rods | 2500.00' |
| 170 | 3/4" X 25' D rods | 4250.00' |
| | 2" X 1-1/2" X 20' pump | <u>20.00'</u> |
| | | 6770.00' |
16. Place well on production, test, shoot a fap and run a dyno as soon as possible.

DGB 2-9-04

Approvals

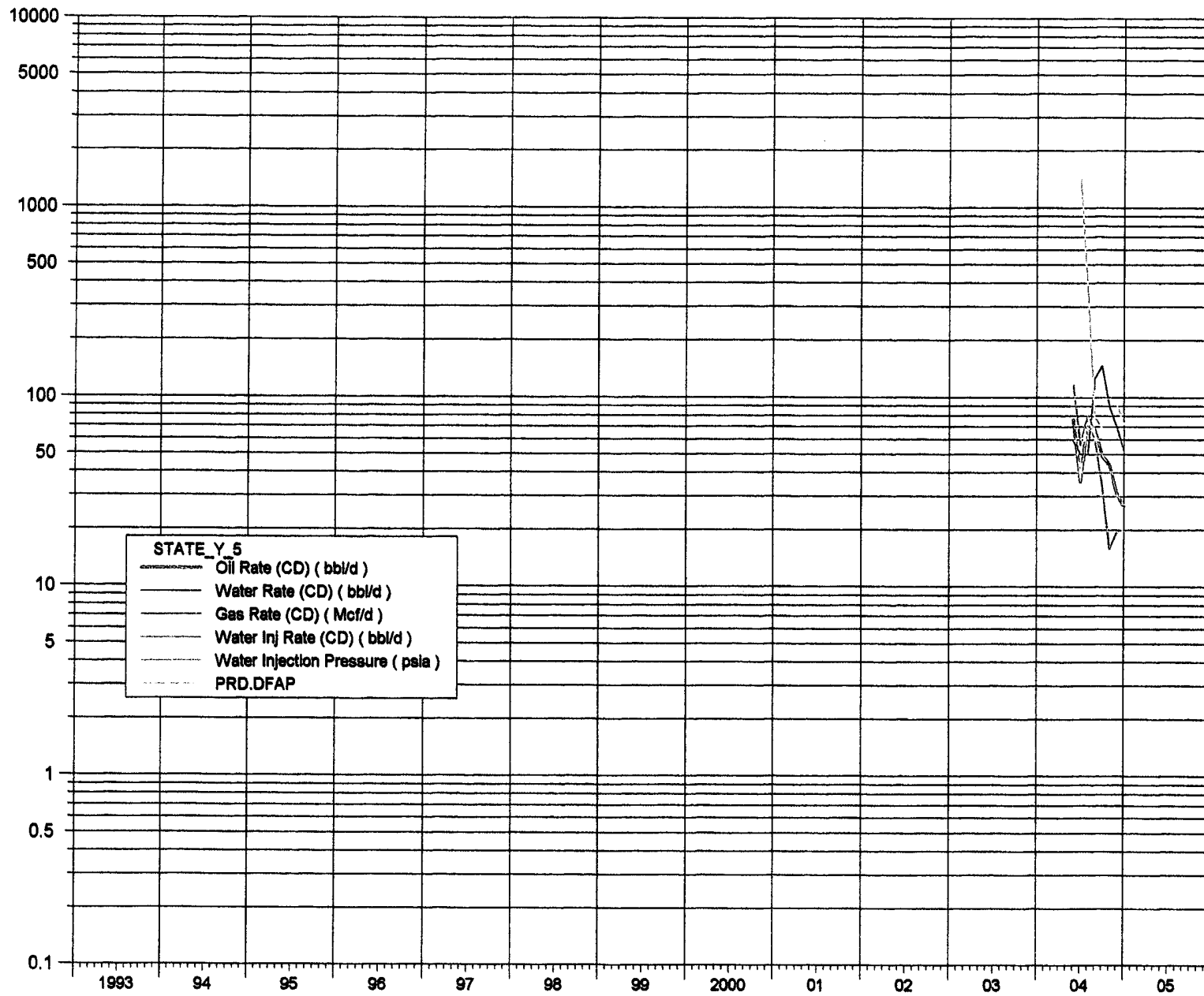
Engineering _____

Operations _____

File:S:\Document\Dbarrett\Excel\SJU\Fusselman\G230FussRecproc.doc

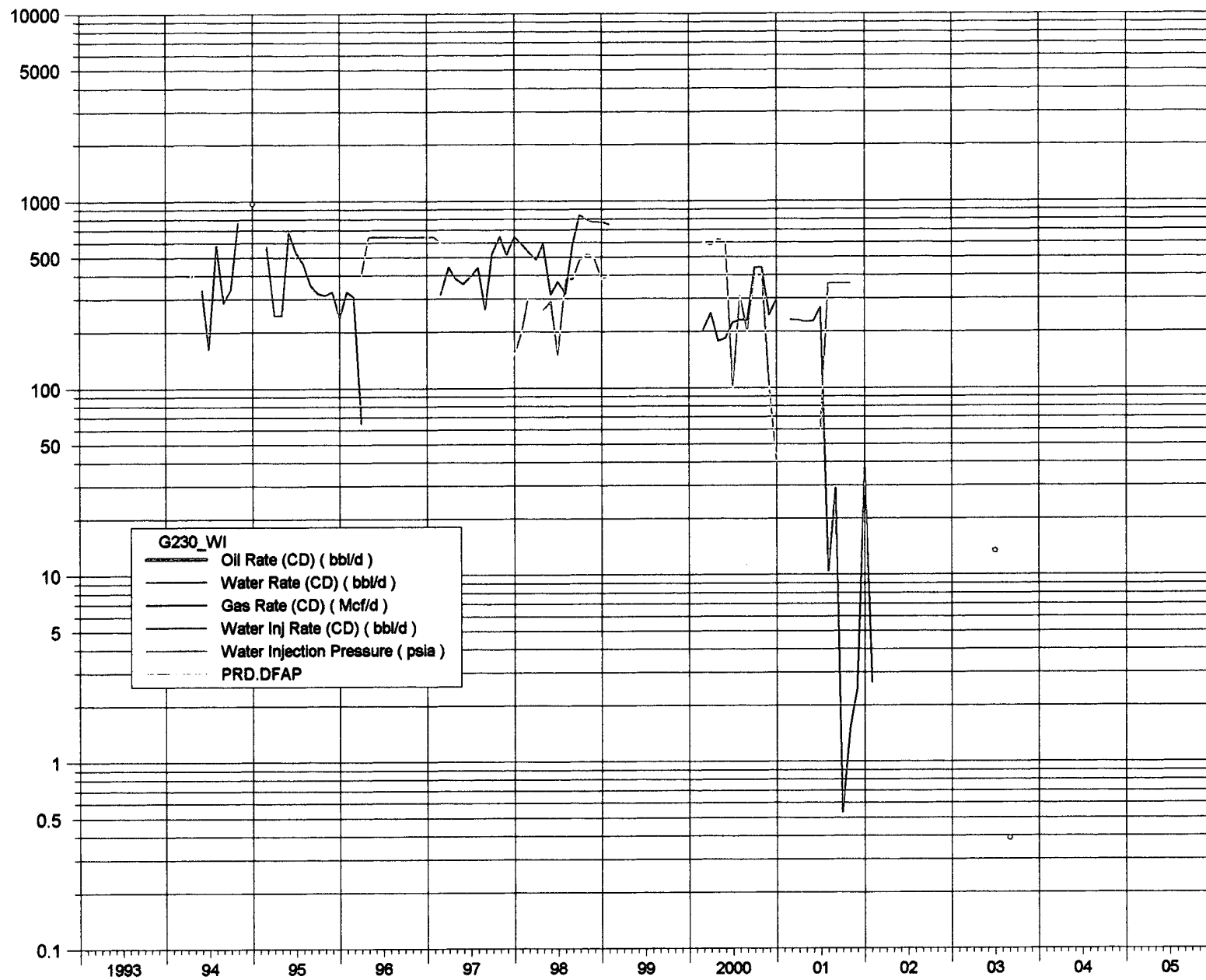
South Justis Unit

STATE_Y_5



South Justis Unit

G230_WI



South Justis Unit

G230_BTD

