State of No			Form C-103 Revised March 25, 1999
Energy, Minerals an	i Natural Resource	WELL API N	
		5. Indicate Ty	
			& Gas Lease No.
LS TO DRILL OR TO DEEPEN TION FOR PERMIT" (FORM (	OR PLUG BACK TO A		e or Unit Agreement Name:
Other		8. Well No.	
X 79701		9. Pool name	
Township 20S	Range 37E	NMPM	the <u>East</u> line  Lea County
	3557 GR		per Data
ENTION TO:		SUBSEQUENT <u>I</u>	REPORT OF:  ALTERING CASING
CHANGE PLANS	COMMENC	E DRILLING OPNS.	PLUG AND ABANDONMENT
	OTHER:	Completion	
ERULE 1103. For Multip	le Completions: Att	ach wellbore diagram	of proposed completion or
			· · · · <b>· · · · · · · · · · · · · · · </b>
pove is true and complete			DATE 0/2/02
\athis_TI	TLE ORIGINAL SIGNE	Manager D B V	DATE 9/3/02 Telephone No. (915) 687-5955
Nathris TI		Maneger TZ	DATE 9/3/02 Telephone No. (915) 687-5955 SEP 1 1 2002
	OIL CONSERVA  1220 South S Santa Fe, N  ES AND REPORTS ON V LS TO DRILL OR TO DEEPEN TION FOR PERMIT" (FORM C  Other  Township 20S  10. Elevation (Show whee  Opropriate Box to Indie ENTION TO: PLUG AND ABANDON [ CHANGE PLANS [ MULTIPLE COMPLETION  Operations. (Clearly state	OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505  ES AND REPORTS ON WELLS LS TO DRILL OR TO DEEPEN OR PLUG BACK TO A TION FOR PERMIT" (FORM C-101) FOR SUCH  Other  EX 79701  Township 20S Range 37E Township 20S Range 37E  OPPOPRIATE BOX to Indicate Nature of No ENTION TO: PLUG AND ABANDON REMEDIAL CHANGE PLANS COMMENCE  MULTIPLE CASING TE COMPLETION OTHER: ODERATIONS. (Clearly state all pertinent details,	Santa Fe, NM 87505  6. State Oil of the State Oil of the South State

#### Laughlin 5 #2

API # 30-025-35862

Sec 5, T20S, R37E

Lea County, New Mexico

- 4/15/2002 Drilling rig off location 4/13/02. Backhoe leveled location. Roustabout crew plumbed cellar valves. Contractor set mast anchors. MIRUPU and install BOP. Note: cost of production casing included in today's cost.
- 4/16/2002 RIH with 3-7/8" RR bit, 4-1/2" casing scrapper, 4 3-1/8" DC and 2-3/8" EUE 8rd tubing. (Tubing transferred 235 joints 7402.32' threads off from Matador stock at Bulldog Yard in Hobbs, Material Transfer #00423). Tagged up at 3845' KB. Tested casing to 2000 psi ok. Drilling closing plug and DV. Passed through DV 15 times. Tested casing to 2000 psi ok. RIH with tubing and tagged up at 6744' KB. Circulate hole clean and SDON. Roustabout crew and backhoe built tank pad. Set 2 500 bbl oil tanks, 1 300 bbl FG water tank and 4x20 heater treater.
- Pickle tubing with 250 gals 15% NEFE HCL LST DI acid and reverse to pit. Spotted 10 bbls 10# brine from 6734 to 6089. Pulled end of BHA to 6534' and reversed 50 bbls to pit removing excess brine. Spotted 500 gal ditto acid from 6534 to 5767. POH with tubing and laid down BHA. ND BOP and installed frac valve. Loaded casing with FW. Pressured casing to 4980 psi. RU Computa Log. Tagged WL PBTD at 6724' KB. Ran GR CCL from 6724 to 5700'. Perforated 6510-6518 with 3-3/8" 6 SPF expendable 22.7 gram, .43 entry hole, 39.56" penetration. POH with WL and found the guns pulled off rope socket. RIH with 3-7/8" overshot to 700'. Fishing tool could not displace fluid. RIH with same tool with 4' perf sub and tool stopped at DV. RIH with 2-1/4" short catch overshot. Engaged guns and POH. Laid down tool and all of perforating assembly. RD WL. Loaded hole with 1.5 bbls FW. Pumped spot acid away as follows: 1 bpm with 2.5 bbls away formation broke at 3370 psi. Increased rate to 5 bpm at 3490 psi. Pumped a total of 13 bbls with ISIP 3198, 5 min 2060, 10 min 1675. SWI. RD Schlumberger. LWSI, SDON. Set 6 frac tanks and filled with 3000 bbls FW. Roustabout crew building battery.
- 4/18/2002 Installed casing saver. RU Schlumberger to frac 6510-6518. Performed pump in test with 208 bbls WF-130 at 40 bpm with 5045 psi. ISIP 3447, 5 min 2950, 35 min 1854. Stage 2 Pad 40 bpm at 5745 psi with 335 bbls YF-130. SD. Lost packing on one pump. Stage 3 Pumped 72 bbls 15% NEFE DI LST acid at 20 bpm with 4573 psi, fluid 178 bbls. SD 1hour with acid on perf's. Replace one pump truck. Stage 4 Pumped 494 bbls YF-130 with 1 ppg 20/40 Jordan sand at 40 bpm with 5424 psi. Formation will not tank frac. Flush to perf's. ISIP 3749 psi 5 min 3360, 10 min 3223, 15 min 3145. SWI. RD frac equipment. Total pumped 1227 bbls, 2624 prop. Average treating pressure 3595, max treating pressure 6752. LLTR 1227. Roustabout crews building battery. Set one lined frac tank for gelled acid job 4/19/02.
- 4/19/2002 RU Schlumberger to **Acidize** 6510-6518'. Started job down casing- 24 bbls 2% KCL, 261 bbls 20% DGA (gelled acid), and 108 bbls WF-120 for flush. Pumped job 40 BPM at 4800 psi, ISIP 3687, 5 min 3129, 10 min 2885, 15 min 2702. SWI. TLTR 1225 (frac) 393 (acid) = 1618 bbls. RD Schlumberger. Start flowback with well pressure falling in to 0 psi in 20 mins. ND frac valve and NU BOP. RIH with 202 joints tubing to 6394' KB. Start swabbing. IFL surface. Swabbed 3 hours, recovered 70 bbls water. EFL 2100' 1% oil cut with slight gas after run. LWOTT, SDON. TLTR 1618, TLR 70, LLTR 1548.
- 4/20/2002 Well is open to tank. Start swabbing. IFL 700', swabbed 10 hours, recovered 164 bbls water and 18 bbls oil. Three hours into swabbing ND BOP and installed tree. EFL 4200' with 10% oil cut, good gas and 100 psi on casing. TLTR 1618, TLR 234, LLTR 1384. LWOTT, SDON.
- Well is open to tank. Start swabbing. Tubing/casing annulus 400 psi. IFL 1900', swabbed 8 hours, recovered 106 bbls water and 31bbls oil. EFL 4200' with 40% oil cut, good gas and 375 psi on casing. TLTR 1618, TLR 340, LLTR 1278. LWOTT, SDON. Hour recovery rate 22, 20, 18, 18, 17, 14, 14, 14 bbls per hour during swabbing.
- Well is open to tank. Start swabbing. Tubing/casing annulus 800 psi. IFL 1800', swabbed 1 hour. Well flowed for 45 mins. Continued swabbing. EFL 4200' with 50% oil cut, good gas and 650 psi on casing. Recovered 22 bbls oil and 22 bbls water. TLTR 1618 TLR 362 LLTR 1256 LWOTT, SDON. Roustabout crew and backhoe built firewall around tanks.
- 4/23/2002 Well is open to tank. Unloaded 6 bbls oil overnight. Tubing/casing annulus 1000 psi. Start swabbing. IFL 1400', swabbed 8 hours. Well would attempt to flow between runs. EFL 4000' with 60% oil cut, good gas and 500 psi on casing. Recovered 55 bbls oil and 35 bbls water. TLTR 1618 TLR 397 LLTR 1221. Bled tubing/casing annulus to tank. Pumped 15 bbls FW in tubing and 15 bbls in tubing/casing annulus. ND Tree, NU BOP and POH with tubing. LWOTT SDON. Welder built 2-7/8" slotted mud joint and slotted 2-3/8" SN.

#### Laughlin 5 #2

API # 30-025-35862

Sec 5, T20S, R37E

Lea County, New Mexico

4/24/2002 Gravity 30 bbls FW in casing from frac tanks. RIH with BHA and tubing. ND BOP, set TAC with 21" or 12 points tension and NU tubing hanger. RIH with pump and rods. LWOTT. Contractor set 228 pumping unit.

Tubing Detail:

Tubling	Detail.	
	2-7/8" BPMJ with 2-3/8" collar on top	32.80
	MJ has 4 entry slots	
	4-1/2" x 2-3/8" dummy TAC	3.05
	2-3/8" slotted SN (3 slots)	1.00
	2-3/8" x 1-25/32 SN	1.10
	4-1/2" x 2-3/8" Mod B TAC	3.00
213 jts	2-3/8" EUE 8rd N-80 4.7#	6405.87
		6446.82
	KB adjustment	17.00
	EOT	6463.82

#### Rod Detail

2" x 1-1/2" x 16' RHBC HVR 1" x 20'
gas anchor 1-5/8" FN
3/4" x 1' lift sub
1.00
172 3/4" x 25' Trico D with FHT cplgs
4300.00
82 7/8" x 25' Trico D with SHT cplgs
7/8" x 6' Trico D sub
1-1/2" x 26' polish rod with spray
6391.00

4/25/2002 Contractor aligned pump jack. Electricians installed temperature control panel and connected to rental generator.

Start well pumping to test tank. Roustabout crew, backhoe installed flowline, built wellhead and installed 3" gas line to the Laughlin 5 # 1. After 3 hours running the gas rate a Laughlin 5 # 1 had increased from 78 to 170mcfd. LWPON.

4/26/2002 39 oil, 39 MCF, 104 water

4/27/2002 237 oil, 114 MCF, 25 water, transferred 155 bbls from frac tank

4/28/2002 19 oil, 134 MCF, 20 water

4/29/2002 74 oil, 153 MCF, 20 water. Electricians installed power line to battery. Crew installed service to pumpjack. Pumper found the well down. Electricians found the motor bearings locked-up. Tomsco (pumping unit provider) replaced electric motor. Well down 5 hours during installation of motor and power line service.

4/30/2002 58 oil, 128 MCF, 32 water, down est 7 hours. Electricians finished electrical installation.

5/1/2002 77 oil, 151 MCF, 7 water

5/2/2002 67 oil, 42 MCF, 16 water

5/3/2002 63 oil, 128 MCF, 7 water

5/4/2002 66 oil, 66 MCF, 8 water

5/5/2002 58 oil, 123 MCF, 7 water

5/6/2002 53 oil, 126 MCF, 7 water, ProKem treated

5/7/2002 65 oil, 130 MCF, 6 water

5/8/2002 61 oil, 127 MCF, 4 water

5/9/2002 64 oil, 126 MCF, 5 water

5/10/2002 66 oil, 136 MCF, 3 water



## Laughlin 5 #2

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Sec 5, T20S, R37E

**API # 30-025-35862** Lea County, New Mexico

5/11/2002	61 oil, 131 MCF, 1 water	
5/12/2002	64 oil, 132 MCF, 4 water	
5/13/2002	58 oil, 130 MCF, 1 water	
5/14/2002	61 oil, 129 MCF, 4 water	
5/15/2002	64 oil, 130 MCF, 0 water	
5/16/2002	44 oil, 131 MCF, 1 water	
5/17/2002	69 oil, 113 MCF, 4 water	
5/18/2002	55 oil, 118 MCF, 1 water	
5/19/2002	59 oil, 130 MCF, 2 water	
5/20/2002	60 oil, 130 MCF, 5 water	
5/21/2002	53 oil, 127 MCF, 3 water	
5/22/2002	55 oil, 132 MCF, 4 water	
5/23/2002	55 oil, 131 MCF, 3 water	
5/24/2002	56 oil, 127 MCF, 8 water	
5/25/2002	51 oil, 127 MCF, 3 water	
5/26/2002	50 oil, 126 MCF, 4 water	
5/27/2002	49 oil, 131 MCF, 5 water	
5/28/2002	55 oil, 125 MCF, 3 water	
5/29/2002	50 oil, 127 MCF, 7 water	
5/30/2002	49 oil, 127 MCF, 5 water	
5/31/2002	50 oil, 127 MCF, 3 water	
6/1/2002	46 oil, 128 MCF, 5 water	
6/2/2002	50 oil, 128 MCF, 4 water	
6/3/2002	53 oil, 123 MCF, 3 water, prokem treated	
6/4/2002	44 oil, 124 MCF, 3 water, cir tank	
6/5/2002	44 oil, 121 MCF, 4 water	
6/6/2002	54 oil, 140 MCF, 18 water	
6/7/2002	58 oil, 149 MCF, 5 water	
6/8/2002	50 oil, 148 MCF, 7 water	

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#### Laughlin 5 #2

Sec 5, T20S, R37E

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Lea County, New Mexico

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6/9/2002 58 oil, 150 MCF, 7 water
6/10/2002 52 oil, 148 MCF, 5 water
6/11/2002 55 oil, 148 MCF, 3 water
6/12/2002 50 oil, 144 MCF, 3 water
6/13/2002 73 oil, 147 MCF, 4 water
6/14/2002 44 oil, 145 MCF, 1 water
6/15/2002 41 oil, 135 MCF, 0 water
6/16/2002 47 oil, 134 MCF, 2 water
6/17/2002 54 oil, 135 MCF, 2 water, Prokem treated
6/18/2002 47 oil, 130 MCF, 1 water
6/19/2002 47 oil, 134 MCF, 4 water
6/20/2002 47 oil, 134 MCF, 1 water
6/21/2002 46 oil, 134 MCF, 4 water
6/22/2002 50 oil, 134 MCF, 3 water
6/23/2002 53 oil, 134 MCF, 3 water
6/24/2002 47 oil, 133 MCF, 2 water. MIRUPU for Tubb addition.
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- Pulled 15 triples of rods. Pumped 5 bbls FW inside tubing. FOH with rods and pump. Slight paraffin on rod and pump. Pumped 5 bbls FW in tubing and 10 bbls in annulus. ND wellhead, release TAC, NU BOP. POH with tubing. Anchors had paraffin inside slip area. Pumped 12 bbls in casing. RIH with 4-1/2" x 2-3/8" TS RBP. Located SJ at 6102-6074. Found 1' needed to be subtracted from tally to correct to wireline measurements (W/O KB). Located collar at 6491. Set RBP at 6480' with 3' in on 206th joint, from CCL GR log. Release setting tool and circulate hole with 118 bbls FW to stock tank. Tested casing, RBP to 2500 psi ok. Spot EOT at 6434. SWI, SDON. Contractor set 4 frac tanks and started filling with FW.
- RU Schlumberger. Spot 500 gals 15% NEFE DI LST HCL. POH with tubing. Loaded hole with FW. ND BOP, NU Frac valve. Tested casing, RBP, wellhead to 5000 psi ok. RU JSI and **perforated** Tubb from 6428-34', 3-3/8" casing gun, 3 SPF, 120 deg phasing, 11 gram, .34" EH, 19.08" penetration. RU wireline. Breakdown perforations at 240% psi. Pumped total 17 bbls at 4.4 bpm 2475 psi max psi, ending 4.4 bpm at 2310. ISIP 2007 5# vacuum. RD Schlumberger. SWI, SDON.
- RU Treesaver International. Run Schlumberger to frac Tubb from 6428-34'. Stage 1 189 bbls WF-130, 30 bpm 5109 psi with casing loading at 30 bbls away. Perform set down 15 bpm 3979, 8 bpm 3400, ISIP 3060 psi. Stage 2 333 bbls YF-130ST with 1825# 20/40 Jordan at .5 ppa in 500# sluges. Pressure decreased to 4700 psi. Stage 3 1.0 ppa, in 149 bbls, at 4552 psi, at 30 bpm. Stage 4 2.0 ppa 7793# sand, in 104 bbls, 30 bpm, 4250 psi, Stage 5 3.0 ppa 14,766# sand, in 135 bbls, 30 spm, 4017 psi. Stage 6 4.0 ppa, 19,789# sand in 140 bbls, 30 bpm, 3848 psi. Stage 7 5.0 ppa 19827# sand in 117 bbls, 30 bpm, 3661 psi. Stage 8 6.0 ppa 24272# sand, in 131 bbls, 30 bpm, 3554 psi. Stage 9 Flush 98 bbls WF-130. ISIP 3036 psi, 5 min 2893 psi, 10 min 2815 psi, 15 min 2724 psi. Total volumes 1397 bbls slurry, 94084 lbs 20/40 Jordan sand. RD Treesaver, RD Schlumberger. Connect well to test tank. Open well at 12:15 with 1750 psi after 1 hour 45 mins SI time. First hour flowed 33 bbls at 1000 psi, Second hour 29 bbls at 400 psi with slight sand after 40 bbls flowed back. After 2 hours 15 min well stopped flowing. ND Frac valve, NU BOP, RIH with 4-1/2 RBP retrieving tool, SN, 200 joints tubing to 6315. While RIH with tubing sand was observed in casing valves. RU pump truck reverse hole with 120 bbls FW at 1.8 bpm at 400 psi. Attempted to start swabbing, finding slight paraffin in tubing. Ran paraffin knife several times and cleaned out to 1500'. LWOTT, SDON. TLTR 1397, TLR 62,

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#### Laughlin 5 #2

API # 30-025-35862

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Sec 5, T20S, R37E

Lea County, New Mexico

TLLTR 1335.

6/28/2002 Well is open to test tank. IFL 300'. Swabbed 9 hours. Recovered 205 bbls water with 1% oil cut last hour of swabbing. EFL 2400' on 27 swab runs. TLTR 1397, TLR 267, TLLTR, 1130.

6/29/2002 Well is open to test tank. IFL 1200'. Casing pressure 175 psi. Swabbed 6 hours. Recovered 137 bbls with 5% oil cut and good gas the last hour of swabbing. During swabbing the casing pressure fell to 50 psi. At the end of the swabbing period the casing pressure increased to 300 psi. EFL 2400' on 20 swab runs. TLTR 1397, TLR 404, TLLTR 993.

6/30/2002 SDFWE

7/1/2002 Well is open to test tank. Well is unloading to tank. Tubing pressure 200 psi on 16/64 choke. Casing pressure 500 psi. Well flowed 310 bbls water to frac tanks with tanks running over. Vacuum truck picked up 50 bbls water with skim of oil. Backhoe and roustabout crew cleaning location. Well tubing pressure increased to 400 psi and casing built to 850 psi, with a 45% oil cut. SI tubing valve and bled tubing/casing annulus pressure to 100 psi. Started flowing tubing to test tank at 560 psi. Pumping in annulus to circulate well. Pumped a total of 130 bbls FW. RIH and tagged sand at 6440'. Installed stripper, tubing swivel and started loading hole. Pumped 5 bpm to get 3 bpm returns. Washed sand off and engaged RBP. Circulated sand to surface. Released RBP. POH with tubing and tools. RIH with 2-7/8" slotted mud joint, 4-1/2" TAC, slotted SN, 2-3/8" x 1-25/32 SN and 200 joints 2-3/8" EUE 8rd 4.7# J-55 tubing. RIH with rods and laid down rods. ND BOP, set TAC with 13 points 21" tension. Installed 7-1/16" 5K tree. SWI, SDON. Original load TLTR 1397, TLR 764, TLLTR 633. 7/1/02 Load recovering RBP 330. Revised load to recover is 963. Transports emptied frac tanks.

**Tubing Detail** 

2-7/8" EUE 8rd J-55 BPMJ with 2-3/8" collars on both ends 32.80 4-1/2" s 2-3/8" Mod B TAC 3.00 2-3/8" slotted SN 1.10 2-3/8" x 1-25/32" SN 1.10 200 jts 2-3/8" EUE 8rd 4.7# J-55 6311.12 200 its total tubing and tools 6349.12 KB adjustment and anchor setting 17.00 EOT 6366.12

7/2/2002 Well is shut in. Casing with slight blow, tbg dead at 7:30 AM. RDMOPU. MIRUSU. At 10:00 AM casing 480 psi, tubing 400 psi. Flowed well to test tank for 1 hour with rate falling off. Run swab. IFL 1200', 800' 400' and started flowing. Produced 141 bbls water at 80 - 100 psi on tubing/casing building to 650 psi. Turned well to battery at 4:00 PM. At 8:00 AM 7/3/02 well produced 152 bbls water, 11 bbls oil, and flowing 500 mcfd. Tubing pressure 100 psi on 3/4" open choke, casing 600 psi. Revised TLTR 1727, TLR 1060, TLLTR 667.

7/3/2002 30 oil, 165 MCF, 200 water

7/4/2002 64 oil, 286 MCF, 98 water, 66 tbg pressure, 475 csg pressure, 23 hour test

7/5/2002 72 oil, 558 MCF, 75 water, 90 tbg pressure, 490 csg pressure

7/6/2002 66 oil, 578 MCF, 80 water, 100 tbg pressure, 450 csg pressure

7/7/2002 69 oil, 583 MCF, 66 water, 110 tbg pressure, 455 csg pressure

7/8/2002 69 oil, 583 MCF, 69 water, 90 tbg pressure, 450 csg pressure

7/9/2002 121 oil, 589 MCF, 65 water, transferred some oil from frac tank

7/10/2002 70 oil, 595 MCF, 60 water

Water Analysis from 7/09/02

#### Laughlin 5 #2

Sec 5, T20S, R37E

API # 30-025-35862

Lea County, New Mexico

Anions ppm Chlorides 59298 Sulfates 9697 Carbonates 0 Bicarbonates 636

 Cations
 ppm

 Calcium
 10061

 Magnesium
 2739

 Iron
 364

 Sodium
 26295

Total dissolved solids: 119999.5

Total Ion equivalent NaCl concentration = 105650 ppm

7/11/2002 64 oil, 607 MCF, 48 water, 120 tbg pressure, 440 csg pressure

7/12/2002 77 oil, 719 MCF, 52 water, 130 tbg pressure, 440 csg pressure

7/13/2002 77 oil, 720 MCF, 54 water, 105 tbg pressure, 430 csg pressure

7/14/2002 69 oil, 767 MCF, 53 water, 110 tbg pressure, 430 csg pressure

7/15/2002 79 oil, 772 MCF, 53 water, 110 tbg pressure, 430 csg pressure

7/16/2002 71 oil, 780 MCF, 49 water, 110 tbg pressure, 430 csg pressure

7/17/2002 80 oil, 779 MCF, 46 water, 90 tbg pressure, 420 csg pressure. FINAL REPORT.