Form 3160-5

# Oil Cons. N.M. DIV-Dist. 2 UNITED STATES 1301 W. Grand Avenue DEPARTMENT OF THE INTERIOR Sia. NM 88210

FORM APPROVED

RIPE	BUREAU OF LAND MANAGEMENT		Budget Bureau No. 1004-0135				
DUNE	TO OF DAILD MAINAGE	ENV MAINAGEMENT			Expires: March 31, 1993		
SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.					5. Lease Designation and Serial No.		
· •	TION FOR PERMIT —" for	-	ent reservoir.	6. If Indian, Alottee or Tribe Name			
USE APPLICA	TION FOR PERMIT - TOP						
SUBMIT IN TRIPLICATE RECEIVED					7. If Unit or CA, Agreement Designation		
1. Type of Well: ☑ OIL. ☐ GA WELL ☐ WE			7 2003	8. Well Name an L	d Number ENTINI 1 FEDERAL		
2. Name of Operator CHEVRON USA INC				2			
3. Address and Telephone No. 15 SMITH ROAD, MIDLAND, TX 79705 915-687-737					9. API Weli No. 30-015-27534		
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  Unit Letter C: 330' Feet From The NORTH Line and 1650' Feet From The					10. Field and Pool, Exploaratory Area HERRADURA BEND; DELAWARE, EAST		
WEST Line Section 1	Township <u>23-S</u>	Range _	28-E	11. County or Pa	rish, State EDDY, NM		
12. Check Appropriate Check Ap	oriate Box(s) To Ind	icate Nature	of Notice, Re	port, or Oth	ner Data		
					PE OF ACTION		
<ul><li>✓ Notice of Intent</li><li>☐ Subsequent Report</li></ul>		Abandonment Recompletion Plugging Back Casing Repair			Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off		
Final Abandonment Notice		Atlering Casing			Conversion to Injection		
Final Abandonment Notice	<b>✓</b>	✓ OTHER: ADD PAY & FRAC ST		im 🗌	Dispose Water		
				(Ne Co	ote: Report results of multiple completion on Well impletion or Recompletion Report and Log Form.)		
<ol> <li>Describe Proposed or Completed Operation directionally drilled, give subsurface location</li> </ol>	s (Clearly state all pertinent det s and measured and true vertic	ails, and give pertine al depths for all mar	ent dates, including ex kers and zones pertin	stimated date of s ent to this work,)*	tarting any proposed work. If well is		
CHEVRON U.S.A. INTENDS TO ADD D PROGRAM.	ELAWARE PAY AND FRA	C STIMULATE T	HE SUBJECT WE	LL AS PART C	F THE LENTINI WATERFLOOD		
THE ADDED PAY WILL BE CONVERTE	ED TO WATER INJECTION	N SERVICE UPOI	N REGULATORY	APPROVAL.			
THE INTENDED PROCEDURE AND W	ELLBORE DIAGRAM IS AT	TTACHED FOR Y	OUR APPROVAL	• .			

**SUBJECT TO** LIKE APPROVAL BY NMOCD



40	. 0				
14. I hereby certify that the fogegoing is true and correct SIGNATURE	Lake TITLE	Regulatory Specialist		DATE	10/31/2003
	se Leake				
(This space for Federal or State office use)					
APPROVED CONDITIONS OF APPROVAL, IF ANY:	TITLE		DATE		
Title 18 U.S.C. Section 1001, makes it a crime for any per representations as to any matter within its jurisdiction.	son knowingly and willfully to m	ake to any department or agency of the United States a	any false, fictitiou	us or fraudulent sta	atements or

# Lentini Federal 1 #2

# Add Delaware Pay & Fracture Stimulate

# 330' FNL & 1650' FWL Section 1, T23S, R28E Eddy County, New Mexico

Date: September 5, 2003

WBS No:

Cost Center: UCKF10100

Elevation: 3070' GL 3082' KB

TD: 6400' PBTD: 6325'

Surface: 8-5/8", 23#, M-50 casing at 517' w/ 600 sx. TOC at surface.

Production: 5-1/2", 15.5# K-55 casing at 6400' w/ DV at 3182' w/ 1350 sx, circ.

Open Perforations: Delaware (2 SPF) 5220'-35', 5358'-66', 5905'-11', 5958'-68', 6080'-94',

(1 SPF) 6180'-94'.

Tubing: 2-3/8", 4.7#, J-55, (182 jts) TAC at 5625', 14 jts tbg, SN at 6062', Odessa

separator, MAJ/BPOB at 6106'. Ran 3/11/99.

Rods/Pump: 1-1/4" Insert Pump on 7/8" rod string. Comments: 1. Use 2% KCL for workover fluid.

2. Well has history of paraffin problem.

- 1. MIRUPU. Unseat pump and TOOH w/ rods and pump.
- 2. ND Tree. NU 5M BOP's. Release TAC. TOOH w/ 2-3/8" tubing, standing back.
- 3. RU Baker. Perf Delaware w/ 2 JSPF, 120<sup>o</sup> from 6194'-6203' (19 holes), 6134'-48' (29), 6062'-80' (37), 6047'-52' (11), 5978'-6003' (51), 5943'-58' (31), 5896'-5905' (19) 5887'-91' (9) and 5633'-44' (23) using 3-1/8" Slick Guns. RD Baker.
- 4. TIH treating packer and RBP on 2-7/8" workstring. Set packer and RBP to isolate new and existing perfs for acid as per schedule in Step 5.
- 5. RU Schlumberger. Acidize new and existing perfs w/ 15% HCL w/ bio-ball sealers for divert at 3-4 BPM as per following schedule and attached design dated 9/5/03. Flush w/ 2% KCL. Total 9200 gals acid and 267 ball sealers.

<u>Stage</u>	<u>Perforations</u>	<u>Acid Volume</u>	Diversion & Rate
. 1	USO 6 80'-6203'	1500 gals	No balls, 2-3 bpm
2	6134'-6148'	1000 gals	42 balls, 4-5 bpm
3	6047'-6096'	2000 gals	117 balls, 4-5 bpm
4	5978'-6003'	1300 gals	75 balls, 4-5 bpm
5	5943'-5968'	1300 gals	No balls, 2-3 bpm
6	5887'-5911'	1300 gals	No balls, 2-3 bpm
7	5633'-5644'	800 gals	33 balls, 4-5 bpm

Lentini Federal 1 #2 Add Delaware Pay and Fracture Stimulate September 5, 2003

- 6. Swab test perfs 5633'-44' after acid to evaluate for fracture stimulation.
- 7. TOOH w/ packer and RBP. TIH w/ packer and set at approximately 6110'.
- 8. Fracture stimulate Delaware perfs 6134'-48' and 6180'-6203' down 2-7/8" workstring w/ 17,500 gals 30# x-linked gel and 50,000# 16/30 100% resin coated sand at 15 BPM as per attached design dated 9/4/03. Pump 2% KCL down annulus during treatment at 0.5 BPM. Anticipated max surface treating pressure is 2650 psi. Flush to top perf w/ 1500 gals 30# linear gel. RD Schlumberger. Shutin well overnight to allow resin coated sand to cure.
- 9. Release packer & TOOH w/ workstring.
- 10. RU Baker. Set CIBP at 6110'. RD Baker.
- 11. TIH treating packer on 2-7/8" workstring. Set packer at 6050'
- 12. RU Schlumberger. Fracture stimulate Delaware perfs 6047'-52' and 6062'-94' down 2-7/8" workstring w/ 17,500 gals 30# x-linked gel and 50,000# 16/30 100% resin coated sand at 20 BPM as per attached design dated 9/4/03. Pump 2% KCL down annulus during treatment at 0.5 BPM. Anticipated max surface treating pressure is 3350 psi. Flush to top perf w/ 1500 gals 30# linear gel. RD Schlumberger. Shut-in well overnight to allow resin coated sand to cure.
- 13. Release packer & TOOH w/ workstring.

NOTE: If perfs 5633'-44' are to be fracture stimulated based on results of swab test in Step 6 of procedure, continue to Step 14. If perfs are not to be fracture stimulated, skip to Step 18.

- 14. RU Baker. Set CIBP at 5675'. RD Baker.
- 15. TIH treating packer on 2-7/8" workstring. Set packer at 5600'
- 16. RU Schlumberger. Fracture stimulate Delaware perfs 5633'-44' down 2-7/8" workstring w/ 9000 gals 30# x-linked gel and 27,000# 16/30 100% resin coated sand at 18 BPM as per attached design dated 9/4/03. Anticipated max surface treating pressure is 3200 psi. Flush to top perf w/ 1400 gals 30# linear gel. RD Schlumberger. Shut-in well overnight to allow resin coated sand to cure.
- 17. Release packer & TOOH w/ workstring.
- 18. MIRU power swivel, reverse unit and foam air unit. TIH w/ 4-3/4" bit and drill collars on 2-7/8" workstring. Clean out sand and drill out CIBP at 5675' (if necessary) and 6110'. Clean out hole to PBTD at 6325'. TOOH & lay down bit and drillstring. \*\*\*James, can we use bit & bailer instead of foam air?

Lentini Federal 1 #2 Add Delaware Pay and Fracture Stimulate September 5, 2003

- 19. TIH w/ 2-7/8" production tubing. Set SN at least 50' below bottom perf.
- 20. Swab to evaluate production rates. Forward swab results to Felix Trevino for pump design.
- 21. ND BOP's. NU tree.
- 22. TIH w/ rods and pump and hang well on. RDMOPU.
- 23. Return well to production and place on test.

# **List of ChevronTexaco Contacts**

OS. Danny Lovell Office: 505.887.5676 Cell: 505.390.0866

Lease Operator Joe Garcia Cell: 505.631.9016

Lease Operator Earnest Roberts Cell: 505.631.9019

Engineer. Joe Williams Office: 432.687.7193 Cell: 432.894.5022

Artificial Lift Rep. Felix Trevino Office: 505.394.1245 Cell: 505.390.7180

Lentini Federal 1 #2 Add Delaware Pay and Fracture Stimulate September 5, 2003

# EQUIPMENT AND FLUID REQUIREMENTS WIRELINE SERVICES

Baker Atlas.

Hobbs 505.392.7593

Perf charges are HSC-4000-311T w/ 0.38" diameter, 21" penetration.

## DELAWARE ACID JOB: (7 Stages as per Step 5 of Procedure)

Schlumberger to Provide

Hobbs 505.393.6186

- 9200 gals. 15% HCL w/ additives as per attached specifications dated 9/5/03.
- 267 biodegradable ball sealers (1.15 SG, 7/8" OD)

#### ChevronTexaco to Provide

• 2% KCL for flush

# DELAWARE FRACTURE STIMULATION 1: (6134'-48' & 6180'-6203' per Step 8)

Schlumberger to Provide

Hobbs 505.393.6186

- Additives for 17,500 gal YF130ST fluid system for frac as per attached specs 9/5/03.
- Additives for 1500 gal WF130 fluid system for flush as per attached specs 9/5/03.
- 50,000 lbs 16/30 CR4000 (100% Curable Resin Coated Sand)

## ChevronTexaco to Provide

- One frac tank loaded w/ 480 bbls. fresh water for gelled fluids
- One frac tank loaded w/ 120 bbls. fresh water for prime up, flush and bottoms
- Kill truck loaded w/ 2% KCL pump down backside during job.

# DELAWARE FRACTURE STIMULATION 2: (6047'-52' and 6062'-94' per Step 12)

Schlumberger to Provide

Hobbs 505.393.6186

- Additives for 17,500 gal YF130ST fluid system for frac as per attached specs 9/4/03.
- Additives for 1500 gal WF130 fluid system for flush as per attached specs 9/4/03.
- 50,000 lbs 16/30 CR4000 (100% Curable Resin Coated Sand)

#### ChevronTexaco to Provide

- One frac tank loaded w/ 480 bbls. fresh water for gelled fluids
- One frac tank loaded w/ 120 bbls. fresh water for prime up, flush and bottoms
- Kill truck loaded w/ 2% KCL to pump down backside during job.

# DELAWARE FRACTURE STIMULATION 3: (5633'-44' if Necessary, See Step 6)

Schlumberger to Provide

Hobbs 505.393.6186

- Additives for 9000 gal YF130ST fluid system for frac as per attached specs 9/4/03.
- Additives for 1400 gal WF130 fluid system for flush as per attached specs 9/4/03.
- 27,000 lbs 16/30 CR4000 (100% Curable Resin Coated Sand)

## ChevronTexaco to Provide

• One frac tank loaded w/ 300 bbls. fresh water for gelled fluids, prime up and flush

#### **WELL DATA SHEET**

Lentini Federal 1 #2 330' FNL & 1650' FWL Section 1, T23S, R28E Eddy County, NM

API NO: 30-015-27534 CHEVNO: OV7885

8-5/8", 23# M-50 Casing at 517' w/ 600 sx. TOC 115' (TS). 200 sx via 1" down annulus to surface.

GL: 3070' KB: 3082

3081 DF:

# Completion & Workover Data

08/03/93 -Spud.

08/93 - Pert 6180'-6194' w/ 1 SPF, 15 Bullet Holes. Acid w/ 1500 gal 7.5% NEFe HCI w/ ball sealers. Frac down 2 7/8" Tbg, w/ 10,500 gal 40# Linear Gel and 17,500 lbs 16/30 sand. Tag and 6270', Swab lw + 509 bbls. Final 1% oil. Spot and plug to 6137'. 9/93- Perf 6080' to 6096', 2 SPF. Acid w/ 1500 gal 15% NEFE HCl w/ ball sealers Swabbed 86 bbls, 100% wtr. Run RBP, set @ 6119'. Swab 62 bbls, 35-40% oil last runs. Re-set RBP at 6050'. Perf. 5905' to 5911' w/ 2 SPF. Acid w/ 1500 gal 7.5% HCl w/ ball sealers. Swab and flow 121 bbls in 12 hrs., 50% oil. Run pre temp and GR. Pump 95 bbls pre pad and 130 bbls gel pad. Run TS and GR logs. Frac perfs 5905' to 5911' w/ 28,000 gal 40 lb linear gel, 51,500 lbs 16/30 Brady sand and 8,000 lbs 16/30 RCS down 2 7/8" tbg. Run after frac logs. Flowed & Swabbed. 154 BLTR. Tag snd at 5915', C/O to RBP at 6050'. Put on pump.

09/24/93 - Pumping 70 BOPD, 214 BWPD, 295 MCFGPD. Stayed in test. 11/93 - POOH w/ prod. equip. Tag sand 6130', wash sand & POOH w/ RBP at 6050'. C/O to 6325'. Run prod. Eq.

3/96- POOH w/ prod eqpt. Rods coated w/ paraffin. Circ tbg & csg w/ hot water. Pickle tbg w/ 400 gals acid. Set RBP at 6033'. Perf 5958'-68' w/ 2 SPF. Acid w/ 750 gals. Frac w/ 18,000 gat x-link pad, 15,400 gat linear get & 48,000# 16/30 BS & 12,000 # RCS. POOH w/ RBP, Run prod eapt.

2/97- Hot water down tbg. POOH w/ prod eqpt. Perf 5358'-66' w/ 2 SPF. Set RBP at 5805'. Acid w/ 2500 gals. Frac w/ 5150 gal 40# lin. gel, 850# 100 mesh & 6750 # RCS. Ran prod eqpt. NOTE: RBP at 5805' left in hole.

6/97. Pulled RBP from 5805'. Re-ran prod. eqpt.

Existing Perfs (Delaware)

5220'-35' (2 SPF)

5358'-66' (2 SPF) 5905'-11' (2SPF)

5958'-68' (2 SPF) 6080'-94' (2 SPF)

6180'-94' (1 SPF)

2-7/8", 6.5# J-55 tubing w/ TAC at 5162', SN at 6234', perf sub, MAJ/BPOB at 6270. Ran 9/99. Records indicate last pulled 7/01. Check files for latest tubing talley.

5-1/2", 15.5# K-55 at 6400' w/ DV at 3182' w/ 700 sx 1st stage & 650 sx 2nd stage, circ.

> PB: 6325 TD: 6400'