Form 3160-5 (August 1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OMB No. 1004-0135 Expires November 30, 2000

FORM APPROVED

SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.					6. If Indian, Allottee or Tribe Name  Jicarilla Apache	
SUBMIT IN TR	RIPLICATE - Other instru	uctions on reverse	side	7. If Unit	t or CA/Agreement, Name and/or No.	
Type of Well     ☐ Oil Well    ☐ Gas Well					8. Well Name; and No.	
2. Name of Operator ConocoPhillips Company					Jicarilla 30 #:5 7 9. API Well No. 30-039-20460 10. Field and Pool, or Exploratory Area	
3a. Address P. O. Box 2197, WL3 6106 Houston TX 77252  3b. Phone No. ( include area code ) (832)486-2329						
4. Location of Well (Footage, Sec., T., R., M., or Survey Description ) NWNE, Sec. 32, T25N, R4W 800' FNL & 1850' FEL					SWD; MESAVERDE  11. County or Parish, State Rio Arriba  New Mexico	
12. CHECK A	PPROPRIATE BOX(ES) T	O INDICATE NATU	RE OF NOTICE, R	EPORT, C	OR OTHER DATA	
TYPE OF SUBMISSION		TY	PE OF ACTION			
<ul><li>☒ Notice of Intent</li><li>☐ Subsequent Report</li><li>☐ Final Abandonment Notice</li></ul>	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	<ul> <li>Deepen</li> <li>Fracture Treat</li> <li>New Construction</li> <li>Plug and Abandon</li> <li>Plug Back</li> </ul>	Production (Star Reclamation Recomplete Temporarily Ab. Water Disposal	,	<ul> <li>□ Water Shut-Off</li> <li>□ Well Integrity</li> <li>☑ Other Step Rate Test</li> </ul>	
If the proposal is to deepen did Attach the Bond under which following completion of the ir	rectionally or recomplete horizonta the work will be performed or pro evolved operations. If the operation and Abandonment Notices shall be	ally, give subsurface location wide the Bond No. on file was results in a multiple comp	ons measured and true virith BLM/BIA. Required letion or recompletion in	ertical depths d subsequent n a new interv	work and approximate duration thereos of all pertinent markers and zones, reports shall be filed within 30 days val, a Form 3160-4 shall be filed once een completed, and the operator has	
ConocoPhillips Company procedure.	proposes to perform a n	ew step rate test on	the above-mention	ned well a	as per the attached	
NO IN	TIFY AZTEC OCD TIME TO WITNESS	A control of the cont	\$ 00 00 00 00 00 00 00 00 00 00 00 00 00			
14. Thereby certify that the foregoname (Printed/Typed) Yolanda Perez	oing is true and correct	Title Sr. Re	gulatory Analyst			
Signature Yolanda 1	ore?	Date 08/13/	2003			
	THIS SPACE	FOR FEDERAL OR S	TATE OFFICE USE			
Approved by /s/ D	avid R. Sitzler	Division of I	Viulti-Resourc	ces	Date SEP 1 7 2003	

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease

which would entitle the applicant to conduct operations thereon.

Office

## CONOCOPHILLIPS PROCEDURE TO STEP RATE TEST THE JICARILLA 30 – 5 SALT WATER DISPOSAL WELL

Well Name:

Jicarilla 30 -5

API# 30-039-2046000

Location:

SE, 800' FNL & 1850 FEL, Sec 32 - T25N-R4W

Lattitude: 36° 21' 40.932" North Longitude: 107°, 16', 21.216" West

Status: The current surface injection pressure limitation as per the EPA is 934 psig. At current pressures, we are able to inject approximately 2 bowpd. At current injection rates, this SWD is not economic and may need to be plugged and a new injection well established nearby. During the initial step rate test for this well, the injection zones were tested in two intervals. As a result of the initial test, surface pressure limitations were set at the limit of 934 psig. Based on injection history, it is assumed that pore pressure around the wellbore has increased significantly to more than 3200 psi. The higher pore pressure will cause the parting pressure of the reservoir rock to increase. This project is to perform a new step rate test on the injection interval, and to seek approval from the EPA for an increased pressure allowance to salvage the well.

**Summary of proposed work:** Shut down injection facility for at least 24 hours prior to performing test. MIRU pump truck (and possibly extra water tanks) and perform a new step rate test to determine the current reservoir parting pressure.

KB Elev:

6423

TD:

7478 (before P&A of lower zone)

GL Elev:

6855

BTD:

6406

Current Injection Zones: MesaVerde

**Existing Casing, Tubing and Packer Information** 

	OD (in)	Depth (ft)	ID (inches)	Weight (#/ft)	Grade
Surface	8.6	244	8.1	24	k-55
Production	4 1/2	7478	4.050	10.5	k-55
Tubing (plastic coated)	2 3/8	4618	1.995	4.7	j-55
Baker plastic coated AD-1 packer	4	4616	2.375		

MAXIMUM ANTICIPATED STIMULATION SURFACE TREATING PRESS: 5000#

Required Equipment: Pump truck w/ pressure monitoring equipment, flowback equipment

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#### Safety

Safe operations are of utmost importance at all ConocoPhillips properties and facilities. To further this goal, the Project Lead and/or rig Toolpusher at the location shall conduct tailgate safety meetings prior to initiation of work, following each change in tour (to review all operations projected during the tour), and also prior to any critical operations. These tailgate safety meetings shall be attended by all Company, contract and service personnel then present at the location. All parties shall review proposed upcoming steps, procedures and potentially hazardous situations. Occurrence of these meetings shall be recorded in the Daily Report.

All personnel arriving on location shall check in with the Project Lead or rig toolpusher. Safety glasses, hard hats and hard-soled shoes will be worn on location.

No Smoking is allowed on location. The Project Lead will set up a designated smoking area. No individual should have matches, lighters, pipes, cigarettes, or cigars on his person within 75 feet of the well.

Rig area shall be posted with no-smoking signs.

All practices and guidelines contained in the ConocoPhillips Well Control Manual are to be followed unless written exceptions are provided. Note: Wells capable of flowing less than 500 MCFD (Category 1) to atmosphere will require one untested barrier, those wells capable of flowing between 500 MCFD and 3000 MCFD (Category 2) to atmosphere will require two untested or one tested barrier, per the ConocoPhillips Well Control Manual.

Emergency/helicopter response information is attached, including driving directions.

#### Pre-job Planning

Notify Operator.

Operator Name: Vincent Veneno

Oper Supv: Terry Bowker

Phone #:(505) 320-0486

Phone #:(505) 599-3448

Notify Operator prior to commencing any work, and after job is completed. Ensure lockout/tagout procedure is followed. If well on plunger lift, ensure timing on plunger capture. Also, if air being used, inform Operator to check oxygen content before putting well back on production. Coordinate any required facility work being done in conjunction with workover.

Contact Procedure Engineer (Tim Tomberlin). Review procedure and call production engineer to discuss as needed. Maintain good communication with engineer on cost, safety, and/or any operational issues.

Coordinate delivery/availability of additional associated equipment. <u>Specific additional equipment needs may include:</u>

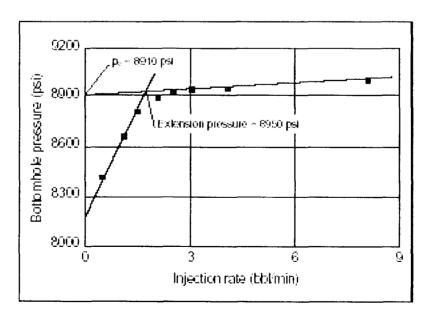
- a. Pump Truck capable of monitoring low rates (<10 bpm),
- b. Surface Pressure recording / monitoring equipment,
- c. High-pressure flowmeter for monitoring flowback, and
- d. A variable choke for flowback control.

Rig anchor check/rig placement planning. Ensure Pusher coordinates. Check all anchors prior to moving in rig. Verify one-call made within 10 days of rig-up for pit work. Date last rig-work done on well: April 19, 2002

Verify data on Helicopter/emergency response plan attached. Validate category of well as per Well Control Manual.

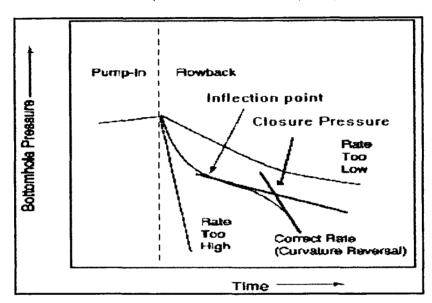
#### PROCEDURE:

- 1. Ensure that well is shut in, energy isolated, locked and tagged out at least 24 hours prior to moving in with pump truck.
- 2. MI & RU pump truck and flowback equipment (project lead is responsible for all safety meetings).
- 3. Establish constant and consistent communication w/ Houston during Test.
- 4. Begin pumping clean produced water (S.G. 1.01) into the perforations at 1/2 BPM. This initial volume pumped should be equal to the calculated volume down to the perforations, in order to have a clear value of the hydrostatic pressure at the injection level.
- 5. Continue increasing the injection rate in small BPM increments (The recommended rates are 0.5, 0.75, 1, 2, 3, 4, 6, 8, 10 or the minimum rate given by the pumping unit). Each step should be maintained the <u>same amount of time</u> (i.e., the time required for the pumps to change and maintain a constant rate and the pressure to be recorded, recommended 30 minutes to ensure wellbore storage is flushed).
- 6. Graph Injection Rate (X-axis) vs. Pressure (Y-axis). Maintain the pumping until a clear change in slope of the Rate-Pressure curve occurs. Take at least five steps beyond the break point before concluding the test.

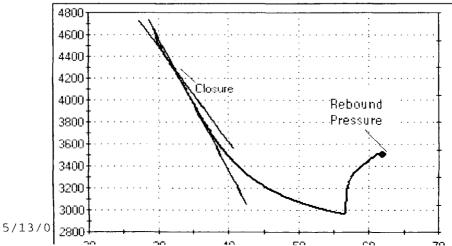


7. Record the pressure and rate information digitally (every second).

- 8. Flow back should start immediately after the step-rate test. Set Flowback rate approximately at 1/6 to 1/4 of last rate in step rate test, employ a high-pressure flowmeter to ensure a constant rate (the use of a variable choke and a visual display of the flow is recommended to continuously monitor the flow rate and to make any needed changes).
- 9. Plot Injection Rate (X-axis) vs. Pressure (Y-axis). Be sure that the correct Flowback rate is obtained (look for a inflection point)



- 10. Continue the flowback and recording pressure until BHP approximately 200 psi above initial Pw. (Use a S.G. of 1.01 for the BHP calculations, consult w/ Houston Staff on Pw and BHP calcs).
- 11. After the desired pressure is reached, start pumping back at the same rate of last step in step rate test; keep pumping for 5-10 minutes.
- 12. Flow back should start immediately after the pump in test. Set Flowback rate approximately at 1/6 to 1/4 of the last rate pumped. The pressure decline for this second test is limited to obtain a rebound pressure. The rebound pressure is the near constant pressure that occurs (following a short period of increasing pressure) after shut-in of the flowback test.\*



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- 13. Continue recording pressure for at least 15 minutes after shutdown. (Communicate the step rate test information to Houston).
- 14. Strict quality control of the pressure and rate data should be maintained throughout the test, as the information will be presented to the EPA. All step rate test information should be reported to Houston and recorded in detail in Wellview (ASCII file and treatment report should be given in a floppy disk to the Co.Rep.)

It is assumed that Tim Tomberlin and Steve Skinner will be in communication via phone from Houston throughout the test, if not on location).

Engineer:

Tim Tomberlin Production Eng.

Phone contact #:

office: 832-486-2328 Cell: 281-705-9421

Attachments: Wellview skematic EMERGENCY RESPONSE SHEET

<sup>\*</sup> The combination of the upper bound estimate of closure pressure from the step rate test, the lower bound of closure pressure determined from the rebound pressure, and the estimate of closure pressure from flow back provides multiple. independent values that establish a firm basis for defining closure pressure.

Well Name:

Jicarilla 30-5

SE, 800' FNL & 1850 FEL, Sec 32 - T25N-R4W

Lattitude: 36° 21' 40.932" North Longitude: 107°, 16', 21.216" West

Prior to each wellsite operation, a pre-job safety meeting should be held with all personnel on location. ConocoPhillips safety requirements, contingency plans, procedures, equipment layout and hook-up, and all other safety concerns should be discussed thoroughly before the job begins in JSA. Additionally, ensure any and all equipment has proper certification, pressure ratings and compliant inspections. Occurrence of PJSA shall be recorded in Wellview

All personnel arriving on location shall check-in with Project Leader or Rig Supervisor. No additional personnel will be allowed on location post-safety meeting after or during operation discussed in safety meeting has commenced.

No jewelry, of any kind, including watches, is allowed on location.

When spotting equipment on location, only one piece of equipments may move at a time with two ground men as spotters required.

No smoking is allowed on location. Rig area shall be posted with no-smoking signs. Additionally, no person may have matches, lighters, pipes cigarettes or cigars on his person while on location. Project Leader will determine if off-location smoking may be permitted during operations. If off-site smoking is allowed, Project Leader will designate and communicate location of smoking area

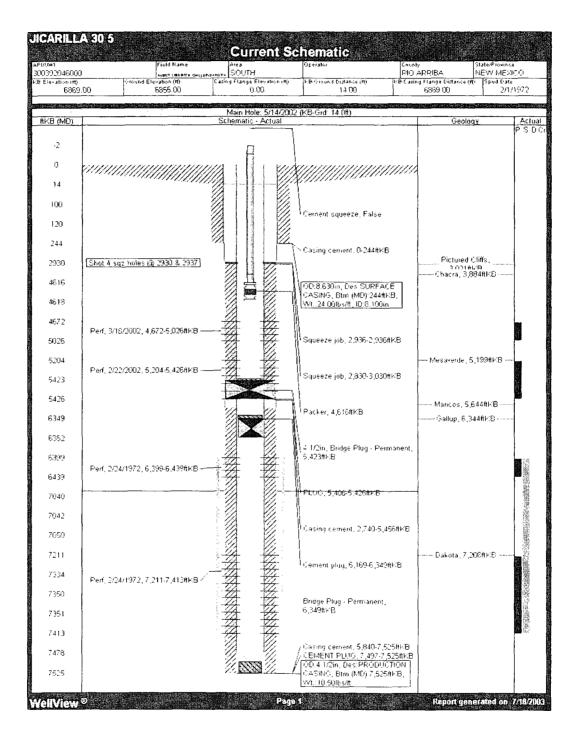
All practices and guidelines contained in the hPhillips Well Control Manual and hConoco North America Fracturing Standards Manual are to be followed unless prior approved written exceptions are provided.

#### **EMERGENCY RESPONSE INFORMATION**

Air Care 1 (see required information below)	911
Ambulance	911
Fire	911
New Mexico State Police	911
San Juan County Sheriff	911
Rio Arriba County Sheriff	(505) 588 - 7271
United States Forest Service	(505) 632 - 2956
Bureau of Land Management	(505) 599 - 6316
N. M. Oil Conservation Division	(505) 334 - 6178
San Juan Regional Medical Center	(505) 325 - 5011

#### Required Information for Air Care 1

- 1. Your name
- 2. Company Name.
- 3. Cellular number or 2-way radio frequency of someone at the scene.
- 4. Wind direction and weather conditions at the scene.
- 5. Type of landing site (location, road, etc.) and any obstacles at landing site.
- 6. Location in degrees and minutes (above and cover page).
- 7. Location of scene in relation to landing site (approximate distance and direction). "Scene is approximately \_\_\_\_\_\_ feet in a \_\_\_\_\_ direction from landing site"
- 8. Number and condition of injured persons and type of injuries.
- 9. Condition of location (do hazards still exist?).



### **CONTRACTORS**

SERVICE COMPANY	CONTACT	PHONE
Downhole Service Center	Gene Rongacre	327-5449
Schlumberger	Diego Reyes	325-5096
Baker- Packers, Plugs	Gary Cleaver	325-0216
Baker Fishing Tools	Doug Bower	327-3266
B&R Wireline	Bill Bean	325-2393
Key Energy	Larry Lewis	327-4935
BJ Services	Dispatcher	327-6222
Blue Jet	Danny Seip	325-5584
Energy Air	Al Walker	634-0113/330-2963(c)
Key (water hauling)	H.C. Putnam	327-0416/486-2100(c)
Synergy	Glen Papp	330-1582(c)/327-8798(p)
Oil Conservation Division		334-6178
San Juan Fire Dispatch	Dispatch	334-6622

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