DISTRICT I	OIL CONSERVATION	ON DIVISION	WELL API NO.
P.O. Box 1980, Hobbs, NM 88240	P.O. Box 20	)88	30-045-60265
DISTRICT II	Santa Fe, New Mexic	o 87504-2088	5. Indicate Type of Lease
P.O. Drawer DD Artesia, NM 88210	•		, —
DISTRICT III			
1000 Rio Brazos Rd., Aztec, NM 87410			6. State Oil & Gas Lease No.
SUNDRY NO	TICES AND REPORTS ON	WELLS	APP SOLDEN SERVICE SERVICE SERVICE
(DO NOT USE THIS FORM FOR PR	OPOSALS TO DRILL OR TO DEEP	EN OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name
	RVOIR. USE "APPLICATION FOR C-101) FOR SUCH PROPOSALS.)	PERMIT"	Troxel
1. Type of Well:			
OIL GAS WELL WELL	OTHER	Mar #	
2. Name of Operator		MAR 2000	8. Wall No.
Pauline Usher c/o Roddy	Production Co., Inc.	CON DIST DIST	1
3. Address of Operator		- 10 - 100 V	9./Pool name or Wildcat
P. O. Box 2221, Farming	ton, NM 87499-2221	12 015 1 0 1V	Aztec Fruitland
4. Well Location	<del> </del>	- Kari	- <u>-                                  </u>
The in Francis	405 Foot From The		700 Foot From The Root Line
Unit Letter P :	495 Feet From The	South meand	Feet From The East Line
0	Township 20N	D 11**	NMPM San Juan County
Section 15	Township 29N	Range 11W ether DF,RKB,RT,GR,etc.)	NMPM San Juan County
	10. Elevation (Show with	sulei Dr, KKB, K1, GK, etc.)	
11. Check A	appropriate Box to Indicate	Nature of Notice, Rep	ort, or Other Data
NOTICE OF IN		, <u> </u>	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	ALTERING CASING
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILLIN	G OPNS. PLUG AND ABANDONMENT
PULL OR ALTER CASING		CASING TEST AND C	EMENT JOB
OTHER:		OTHER:	
12. Describe Proposed or Completed Ope	erations (Clearly state all pertinent deta	uls, and give pertinent dates, inclu	ding estimated date of starting any proposed work)
Plus Well Service Inc. review of the operating to 600 ' and that it is Plus summary: Plug # 2: 400 ' to 800 ' 236 ' to 600 '	During the operation an results we believe the sintact. Review of the principle inside the 5 1/2" casing in the 5 1/2 X 8" casing	additional string of tring of 8 " casing numping data requires g - top tagged g annulus - calc'd a	as per the attached summary from A casing was discovered and after is still in place from the surface the following corrections to the A ssuming no excess ulus - calc'd assuming 100 % excess
	in the 5 1/2 X 8" casing in the 8" casing X 9 7/ Slurry volume pumped ex X 8" annulus, indicating	g annulus - tagged 8" open hole annulus ceeds volumes left i g that the perforati	- calc'd assuming 100 % excess. n the 5 1/2" casing and the 5 1/2" ons penetrated both casing strings indicates the slurry went down.
A schematic of the plugge	ed wellbore is also atta	ched for reference.	
The location has been cle			
I hereby certify that the information above		nowledge and belief.	
	*		DATE March 15 0000
SIGNATURE	Tural	TITLE Business Manage	
TYPE OR PRINT NAME R. E. Field	ler		TELEPHONE NO. 325 - 5750
(This space for State Use)			MAD -
APPROVED BY OPIGINAL SIGNET	D BY E. VILLANUEVA	TITLE TITLE GAS I	NSPECTOR, DIST. 🗪 DATE MAR 16 200
CONDITIONS OF APPROVAL, IF ANY:			

State of New Mexico Energy, Minerals and Natural Resources Department Form C-103

Submit 3 Copies to Appropriate District Office

# A - PLUS WELL SERVICE, INC.

P.O. BOX 1979 FARMINGTON, NM 87499 505-325-2627 • FAX: 505-325-1211

Roddy Production Company Inc. Troxel #1

February 28, 2000 Page 1 of 1

Unit P, SE,SE, Section 15, T-29-N, R-11-W San Juan County, NM Fee Lease, API 30-045-60265

Plug & Abandonment Report

#### **Cementing Summary:**

Plug #1 with CIBP at 1450', with 17 sxs Class B cement with 2% CaCl<sub>2</sub> inside casing above CIBP to 1300' to isolate Fruitland zone.

Plug #2 with 146 sxs Class B cement, squeeze 100 sxs outside 5-1/2" casing from 800' to 400' (using 75% annulus excess) and leave 46 sxs inside casing to cover Kirtland and Ojo Alamo tops.

Plug #3 with 48 sxs Class B cement from 142' to surface, circulate 1 bbl good cement out bradenhead.

Plug #4 with 50 sxs Class B cement pumped into 8" X 10-3/4" casing annulus.

### **Plugging Summary:**

Notified NMOCD on 2/??/00

- 2-23-00 MO, RU. Pressures: tubing 40#, bradenhead 55# and 5-1/2" casing 150#. Layout relief line to pit and blow well down; casing still had 30#. Pump 30 bbls water down 1" tubing to kill well. ND wellhead and NU BOP, test. Remove donut and LD 10' sub and 72 joints 1" tubing. Shut in well and SDFD.
- 2-24-00 Safety Meeting. Open up well and blow down 100# casing pressure and 50# bradenhead pressure; no tubing in well. RU A-Plus wireline truck and round-trip 5-1/2" gauge ring to 1450'. TIH and set 5-1/2" PlugWell CIBP at 1450'. TIH with A-Plus tubing workstring and tag CIBP at 1450'. Load casing and circulate clean with 40 bbls water. Pressure test casing to 300#, held OK. Plug #1 with CIBP at 1450', with 17 sxs Class B cement with 2% CaCl<sub>2</sub> inside casing above CIBP to 1300' to isolate Fruitland zone. PUH with tubing and WOC for 2.5 hours. TIH with tubing and tag cement at 1301'. TOH with tubing. Perforate 2 bi-wire squeeze holes at 800'. Pump red dye down casing and out bradenhead with 38 bbls to circulate. Plug #2 with 146 sxs Class B cement, squeeze 100 sxs outside 5-1/2" casing from 800' to 400' (using 75% annulus excess) and leave 46 sxs inside casing to cover Kirtland and Ojo Alamo tops. TOH with tubing. SI well and WOC. SDFD.
- 2-25-00 Safety Meeting. RU A-Plus wireline truck and TIH; tag cement at 400'. Perforate 2 bi-wire squeeze holes at 142'. RD rig. Establish circulation out bradenhead with water. Plug #3 with 48 sxs Class B cement from 142' to surface, circulate 1 bbl good cement out bradenhead. Shut in well and WOC. ND BOP and wait for backhoe to dig out around wellhead. Attempt to cut window in 8", flowing green cement and gas. Shut in well and WOC overnight. SDFD.
- 2-26-00 Wait on welder 2 hours to hot tap 10-3/4" casing. Connect pump line to 10-3/4" casing and establish rate 1 bpm at 0#. Plug #4 with 50 sxs Class B cement pumped into 8" X 10-3/4" casing annulus. Shut in well and WOC. Wait on welder to cut off wellhead and install P&A marker. Cement in 8" casing full, cement in 5-1/2" casing down 4'. Mix 10 sxs Class B cement and install P&A marker. Backhoe filled in hole around wellhead. Move off location.
  - H. Villanueva, NMOCD, was on location and Bob Fielder, Roddy Production

# Pauline Usher Troxel No. 1 As Plugged Schematic

Calc'd TOC in 5 1/2 X 8" casing annulus from Plug # 2- 236'

Tagged TOC inside 5 1/2" casing from Plug # 2 - 400'. Ojo Alamo top @ 465'

- \_ Calc'd TOC in 8" casing X 9 7/8" OH annulus assuming 10 sac} tack job & 70 % fillup 555'. No data available.
- Kirtland top @ 587'
- \_ Farmington top @ 641'

PLUG # 2: 146 sacks ( 172.3 cf ) pumped through squeeze holes at 800. Plug at:

400' to 800' inside 5 1/2" casing
236' to 600' in 5 1/2" casing X 8" casing
annulus - no excess
600' to 800' in 5½" casing X 7 7/8" OH
annulus - 100 % excess

Calc'd TOC in 5½" casing X 7 7/8" OH annulus @ 70 % fill u 1066'

PLUG # 1: 17 sacks ( 20.1 cf ) spot on top of CIBP from 1308' ( tagged ) to 1450'

Fruitland top @ 1408'

- 5½" CIBP set @ 1450'. Tagged with tubing and pressure tested to 300 #.
  - 5½" casing perforated from 1502' to 1513'

## PROPERTY MANAGEMENT & CONSULTING, INC.

P. O. BOX 2596 FARMINGTON. NEW MEXICO 87499-2596 (505) 325-5220

### Plug and Abandonment Summary

Pauline Usher
Troxel No. 1
495 'FSL - 330 'FEL, Section 15, T29N, R11W, NMPM
San Juan Co., New Mexico
API #: 30 - 045 - 60265

**February 23, 2000:** Move in and rig up A Plus Well Service, Rig No. 6, cement pump, steel pit, water tank, and float with 2 3/8 " EUE work string. FTP = 140 psig. FCP = 150 psig. Bradenhead (51/2 X 8) = 55 psig. Check bradenhead for flow. Blew down to nothing. Started flowing oil while rigging up unit. Rig up line to steel pit off casing valve. Blow casing down to vapors. Kill tubing with 30 bbls. fresh water. Unseat tubing hanger. Tubing is free. Nipple down tubing head adaptor. Nipple up adaptor flange and 7 1/16 " 3000 # BOPE. Pull out of hole with 72 - 20 ' joints of 1 " line pipe and 1 - 10 ' joint. Lay tubing down as it was pulled. Bottom joint was orange peeled on bottom and slotted in the bottom 10 ' so all tubing was recovered. Approximate footage = 1450 '. Shut well in for the night.

February 24, 2000: SICP = 100 psig. Bradenhead = 50 psig. Rig up A Plus wireline truck and 5 1/2" lubricator. Run in hole with 5 1/2 " gauge ring to 1450 '(GL zero ) with out encountering any obstructions. Run in hole with Plug Well 5 1/2 " CIBP on wireline. Set CIBP at 1450 (GL zero). Checked casing collars with CCL. Located casing collars at 1425' and 1457'. On CIBP setting run there was intermittent activity on the CCL from 1400 'down. NMOCD representative expressed concern that this might be indicative of bad casing and requested we consider using a larger cement volume for bottom plug and that the plug be tagged after it was spotted. Agreed to increase plug size to 17 sacks to give 100' of fill above the potential bad casing and to WOC for 2 1/2 - 3 hours and then tag plug to confirm set depth. Run in hole with 46 joints 2 3/8 " EUE work string to tag plug at 1450' with 10' stick up on joint #46. Laid down joint 46 to put end of tubing at 1430'. Roll hole with 34 bbls. fresh water. Pressure test casing to 450 psig for five minutes. Pressured up to 450 psig immediately but pressure bled off to 250 psig in two minutes. There was a sizeable leak between the adaptor flange and the tubing head. NMOCD representative advised this was adequate pressure test. PLUG # 1: Mix 17 sacks Class B cement with 2 % CaCl at 15.6 - 16.0 ppg. Pump to spot from 1430 - 1284 ' with 4.5 bbls. fresh water displacement down tubing. Plug on spot at 10:06 AM. Pull out of hole to 800 ' with tubing. WOC to 1:00 PM. Trip in hole to tag plug top with 3 joints plus 20 feet of # 4 out. Top of plug # 1 at 1308'. Set tubing weight on plug. Allowing for settling, this puts Plug # 1 from 1308 - 1450', 16.5 sacks. Pull out of hole and lay down work string. Rig up lubricator. Run in hole with bi- wire perforating gun. Perforate 2 squeeze holes on 180 degree phasing at 800 '(GL = 0). Rig up pump on 5 ½ " casing. Blow down gas pressure off bradenhead. Pump into casing to establish circulation out bradenhead valve. Took 4 - 5 bbls. of fresh water pumped down casing to start circulating oil out bradenhead. Mix up 10 bbls. of red dye water and pump down 5 1/2" casing. Follow with fresh water. Returns out bradenhead were initially 3 -4 BPM of gas and oil cut water. Rate difficult to determine because of gas cut. Pump in rate held steady at 2 BPM during entire circulation process. Prior to dye water return the returns out the bradenhead valve had changed to clear water at 2 BPM. Brought dye water back to surface with 38 bbls. (including dye water) pumped. Deduction of the bbls. inside casing leaves 18.5 bbls. in annulus. This is 75 % of annular capacity of 5 ½ X 7 7/8 " annulus. Discussed the possibility with the NMOCD representative that we were not circulating through complete annular area and determined that the volume of cement to use for this plug should be calculated by the gauge hole volume (  $5 \frac{1}{2}$  " X 7 7/8") plus 75 % excess. In addition we will include 450 ' of casing volume ( plug length + 50 '). Mixed 146 sacks of Class B cement for PLUG # 2 at 15.6 - 16.0 ppg. Pumped to spot at 400 ' inside 5 1/2 " casing at 400 ' with 9 1/2 bbls. fresh water. Returns out bradenhead valve were constant and equal to pump in rate throughout spot. Plug on spot at 3:00 PM. Bradenhead flow stopped immediately after pump stopped, indicating plug balanced. Shut in casing and bradenhead. Left shut in over night. Note: After surface plug was pumped and bell hole was excavated around wellhead, it was discovered that the bradenhead valve was actually on the annulus between the 5 1/2 " casing and a string of 8 "casing that was not reported as being present in the well, not the 5 1/2 " X

# Troxel No. 1 Plug and Abandonment Summary Page Two

#### February 24, 2000: - continued

10 3/4 " annulus. This eight inch casing string ( 600 ' set depth ) was reported on the open hole log but not on the completion report so it was assumed that this string had been pulled from the well prior to running the 5 ½ " production casing. The following plug depths are calculated assuming this string of casing ( 8 " ) is still in place at 600 ' and that this string of casing is still intact. These assumptions are validated by the calculated annular capacity from the dye water caliper, of .0.0231 bbls / ft being approximately equal to the cementing table value for a 5 ½ "  $\times$  7.375 " annulus of 0.0235 bbls / ft.  $\times$  7.375 " is approximately the ID of  $\times$  8 " , 26 ppf casing.

Plug # 2: 400 - 800 ' inside 5 ½ " casing - 9.76 bbl 600 - 800 ' in 5 ½ " X 7 7/8 " annulus ( 100 % excess ) - 12.36 bbl 236 - 600 ' in 5 ½ " X 8 " annulus ( no excess ) - 8.55 bbl Plug # 2 volume pumped = 30.68 bbls calculated fill volume = 30.67 bbl

February 25, 2000: SICP = 0 psig. Bradenhead = 0 psig. Rig up wireline. Trip in hole with perforating gun to tag top of cement at 400 ' (GL = 0). Tag was evidenced by loss of string weight on line tension gauge. Pull up hole to 142' and perforate two (2) squeeze holes on 180 degree phasing. Pump into 5 1/2" casing with immediate clear water returns to surface through bradenhead valve. Mix 48 sacks of Class B for PLUG # 3 at 15.6 - 16.0 ppg. Pump down 5 1/2" casing until cement returned to surface through bradenhead valve. Circulated approximately one (1) bbl of good cement to surface. Plug on spot at 10:00 AM. Rig down unit. Remove anchors. Nipple down BOPE. No pressure on 5 ½ " casing. Dig bell hole around wellhead. Found 10 3/4 " casing string approximately 1 ½ - 2 feet below ground level. Check 5 ½ " X 8 " annulus for pressure, no pressure on valve. Check both sides for gas with torch. No flare. Made drain cut on 8 " casing. Unset cement with paraffin globules drained out of drain cut. As continued to heat the 8 " to finish the cut we started getting flow out the valve on the 5 ½ " X 8 " annulus but only minor dribble out the drain cut itself. Shut valve to annulus and let well set until 1:00 PM. Flow out drain cut still only a seep, mostly paraffin. Tried to heat 8 " to continue cut and had several minor flashes. Flow out annular valve only 1/8 - 1/4 " trickle. Flow out drain hole still a seep. Appears to be caused by separation of paraffin globules dislodged by cement and when heat is applied to the casing they release gas. Install wellhead and close bradenhead valve. Release rig crew and roustabouts for day. Discussed with NMOCD office and they were concerned that we cannot prove the 10 3/4 " casing is cemented inside the shoe and the only way they will accept the plug and abandonment without drilling out the top cement plug is to tap the surface casing so we can determine whether there is pressure on it and if we can pump into it. See February 26 summary for description of plug depth. Line up welder to do hot tap tomorrow. Left well shut in for night with a minor seep of paraffin coming out of drain hole in 8 " casing.

February 26, 2000: No pressure on either the 5 ½ " casing or the 5 ½ " X 8 " annulus. No seep out of drain hole in 8 ". Rig up welder and weld two collar on 10 3/4 " casing. Install 2 " valve and nipple in collar. Rig up hot tap connection on valve and drill 1 1/4 " hole into side of 10 3/4 " casing. Did have gas pressure inside 10 3/4 X 8 " annulus. Bled down to nothing immediately. Hook up pump to valve and pump 3 ½ bbls water down annulus without hitting pressure which indicates the surface shoe is not cemented and open to the 8 " X 10 3/4 " annulus. Let well flow back to pit while rigging up to cement and discussing cement procedure with NMOCD representative. Flowed back water with a trace of oil for a few minutes and then died. Mixed 50 sacks of Class B with 3 % CaCl and pumped down the 8 " X 10 3/4 " annulus at ½ - 1 BPM and 0 psig. Shut in at well valve. Let set for 30 minutes. Check for flow. Slight flow back. Shut in at valve. Cut off 8 " and 5 ½ " casing approx 2 " above 8 " X 10 3/4 " flange. Ran rod down 5 ½ " X 8 " annulus to tag solid cement at 18 " down from cut (2 -3 feet below GL). Check cement level in 5 ½. Found it at 10 ' 9 " down from wellhead (8 - 9 feet below GL). Check 8 " X 10 3/4 " annulus, on vacuum. Pulled off two inch valve and nipple and installed bull plug. Install dry hole marker, cover bell hole, remove all bulk cement spills and stained soil from the pump truck.

# Troxel No. 1 Plug and Abandonment Summary Page Three

Since we pumped enough slurry on Plug # 3 to fill the 5  $\frac{1}{2}$  " casing to 142', fill the 5  $\frac{1}{2}$  X 8" annulus from 142' to surface, circulate out at least one bbl to surface, and still have 2 - 2  $\frac{1}{2}$  bbls of slurry unaccounted for I say the odds are good that the perf holes at 142' penetrated both the casing strings and opened communication to the 8 X 9 7/8" annulus. Since the 10 3/4" casing was capped on top and we were able to pump into the 8 X 10 3/4" annulus later it is likely that any cement that got into the 8 X 9 7/8" annulus went down. Assuming a 100 % excess in open hole we have maximum fill up in the 8 X 9 7/8" annulus of 37'. This gives Plug # 3 the following description:

9 ' to 142 ' inside 5 ½ " casing - 3.25 bbls
3 ' to 142 ' in 5 ½ X 8 " annulus - 3.27 bbls
142 ' to 179 ' in 8 X 9 7/8 " annulus - 2.41 bbls (assuming 100 % excess)
circulated to pit - 1.00 bbls

Total cement: in plug = 9.93 bbls pumped = 10.09 bbls.

Plug # 4 contained sufficient volume to fill from the perf holes at 142 ' to surface with 250+ % excess to cover the open hole section. Since fluid level was at the surface and holding initially but was dropping when we pulled the valve I would estimate this plug to be from 10 ' to 142 ' in the 8 X 10 3/4 " annulus. A copy of the sundry notice submitted to the NMOCD, reflecting these depths is attached for your records. You will be sent a copy of their approval of this sundry.

Until we uncovered the extra string of casing, even with the additional volumes of cement requested by the NMOCD, we were under estimated costs. With the additional rig time, roustabout time and welder we will be real close to the estimated costs. We are compiling all the invoices and should have a final cost estimate to you shortly. The well is properly plugged and I believe the landowner, Mr. Horvath, is very happy with the way we left his property. We do not anticipate any problems receiving approval from the NMOCD.