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Form C-105
Revised 11-1-78

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5a. Indicate Type of Lease
State <input type="checkbox"/> Fee <input checked="" type="checkbox"/>
5. State Oil & Gas Lease No.

1a. TYPE OF WELL	OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input checked="" type="checkbox"/>	OTHER		
b. TYPE OF COMPLETION	NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEPEN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	OTHER

7. Unit Agreement Name
8. Farm or Lease Name Santa Fe Pacific #7-5
9. Well No. #3
10. Field and Pool, or Wildcat Wildcat

2. Name of Operator
RIO COLORADO OIL & GAS, INC.
3. Address of Operator
1546 Cole Boulevard, Golden, CO 80401
4. Location of Well

UNIT LETTER G	LOCATED 2310	FEET FROM THE North	LINE AND 2310	FEET FROM
THE East	LINE OF SEC. 5	TWP. 17N	RGE. 9W	HMPM

12. County McKinley

15. Date Spudded 12/12/79	16. Date T.D. Reached 12/14/79	17. Date Compl. (Ready to Prod.) N/A	18. Elevations (DF, RKB, RT, GR, etc.) 6865' G.L., 6870' K.B.	19. Elev. Casinghead 6865'
20. Total Depth 1740' Driller	21. Plug Back T.D. N/A	22. If Multiple Compl., How Many N/A	23. Intervals Drilled By Rotary Tools 0-1740	Cable Tools --
24. Producing Interval(s), of this completion - Top, Bottom, Name Dry Hole				25. Was Directional Survey Made No

26. Type Electric and Other Logs Run Schlumberger Dual Induction - SFL Log	27. Was Well Cored No
----------------------------------------------------------------------------	-----------------------

28. CASING RECORD (Report all strings set in well)					
CASING SIZE 7"	WEIGHT LB./FT. 20#	DEPTH SET 82'	HOLE SIZE 8-3/4"	CEMENTING RECORD 35 Sx. reg. w/2% CaCl ₂	AMOUNT PULLED None

29. LINER RECORD				30. TUBING RECORD			
SIZE N/A	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE N/A	DEPTH SET	PACKER SET

31. Perforation Record (Interval, size and number) N/A	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
	DEPTH INTERVAL N/A	AMOUNT AND KIND MATERIAL USED

33. PRODUCTION							
Date First Production N/A		Production Method (Flowing, gas lift, pumping - Size and type pump)					
Date of Test	Hours Tested	Choke Size	Prod'n. For Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	

34. Disposition of Gas (Sold, used for fuel, vented, etc.) N/A	Test Witnessed By
----------------------------------------------------------------	-------------------

35. List of Attachments Wellsite Geologist's Geological Report

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

ORIGINAL SIGNED BY D. P. McCOURT	TITLE Petroleum Engineer	DATE 1/8/80
SIGNED		

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 30 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico

Northwestern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____	T. Strawn _____	T. Kirtland-Fruitland _____	T. Penn. "C" _____
B. Salt _____	T. Atoka _____	T. Pictured Cliffs _____	T. Penn. "D" _____
T. Yates _____	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____	T. Silurian _____	T. Point Lookout <u>479'</u>	T. Elbert _____
T. Grayburg _____	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____	T. Simpson _____	T. Gallup <u>942'</u>	T. Ignacio Qtzte _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinberry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Granite _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn. _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

OIL OR GAS SANDS OR ZONES

from <u>None</u> to _____	No. 4, from _____ to _____
from _____ to _____	No. 5, from _____ to _____
3, from _____ to _____	No. 6, from _____ to _____

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from <u>None</u> to _____	feet _____
No. 2, from _____ to _____	feet _____
No. 3, from _____ to _____	feet _____
No. 4, from _____ to _____	feet _____

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	479	479	Mesa Verde Group				
479	648	169	Point Lookout Sand				
648	942	294	Satan Tongue				
942	1717	775	Crevasse Canyon Sand				
1717	1740	23	Gallup Sand				
NO DRILLSTEM TESTS							

RIO COLORADO OIL AND GAS, INC.

#3 Santa Fe Pacific 7-5
Section 5, T17N - R9W
McKinley County, New Mexico

CONTENTS

SUMMARY	1
FORMATION TOPS	3
DRILL STEM TESTS	3
BIT RECORD	4
DEVIATION RECORD	4
PLUGGING RECORD	4
CHRONOLOGICAL SUMMARY	5
REMARKS	6
SAMPLE DESCRIPTION	7

SUMMARY

WELL NAME: Rio Colorado Oil and Gas, Inc.
#3 Santa Fe Pacific 7-5

WELL LOCATION: SW NE $\frac{1}{4}$ Section 5, T17N - R9W
(2310' F.N.L. & 2310 F.E.L.)
McKinley County, New Mexico

TYPE: Wildcat

ELEVATION: 6865 feet - Ground
6870 feet - Kelly Bushing

TOTAL DEPTH: 1740 feet - Driller
1747 feet - Schlumberger

GEOLOGIST: Achille Vitali, Jr.
6670 West 28th Avenue
Denver, Colorado 80214

CONTRACTOR: Stewart Brothers Drilling Company
Rig #45 - Failing 2500
Pump #1 - Gardner-Denver F.X.D.
Pump #2 - Gardner-Denver F.X.D.
Pusher - Clarence Lucero

COMMENCED: Spudded - 1:00 AM; December 12, 1979
Finished Drilling - 4:05 PM; December 14, 1979
Logged with Schlumberger - December 15, 1979
Plugged and abandoned - December 15, 1979

CASING RECORD:

Surface Casing

Landed 2 joints of 24#, K-55, 7 inch casing at 82 feet kb. Cemented casing with 35 sacks of regular cement containing 2% calcium chloride.

LOGGING RECORD:

Samples

Caught 200' - 1740'

Described 200' - 1740'

Drilling Time

Geolograph 200' - 1740'

Mechanical Logs

Schlumberger

Dual Induction - S.F.L. Log 89' - 1741'

FORMATION TOPS

<u>FORMATION AND AGE</u>	<u>SAMPLE TOPS</u>	<u>LOG TOPS</u>	<u>DATUM</u>
<u>Cretaceous</u>			
Mesa Verde Group	Surface	Surface	+6865'
Point Lookout Sand	480'	479'	- -
Satan Tongue	600'±	648'	- -
Crevasse Canyon Sand	920'	942'	- -
Gallup Sand (Massive	1707'	1717'	- -

DRILL STEM TESTS

No Drill Stem Tests were run in this hole.

BIT RECORD

<u>NO</u>	<u>SIZE</u>	<u>MAKE</u>	<u>TYPE</u>	<u>DEPTH OUT</u>	<u>FEET</u>	<u>HOURS</u>	<u>PUMP PRESS.</u>
1	8 3/4	HTC	Retip	100'	100'	1 1/2	600#
2	6 1/4	Smith	Retip	940'	840'	12	800#
3	6 1/4	Smith	DT-J	1740'	900'	13	800#

DEVIATION RECORD

No Deviation Surveys were run in this hole.

PLUGGING RECORD

Verbal permission to plug was obtained from Mr. L. Kendrick of the New Mexico Oil and Gas Conservation Commission.

Mr. Kendrick recommended the following program:

<u>Depth of Plug</u>	<u>Sacks of Cement</u>
1650' - 1740'	20 sacks
550' - 650'	30 sacks
50' - 130'	20 sacks
Surface Marker	10 sacks

CHRONOLOGICAL SUMMARY

December 11	Rigged down and moved. Rigged up.
December 12	Spudded at 1:00 AM. Drilled surface hole. Ran Surface Casing. Waiting on cement. Nippled up. Drilled out at 10:00 PM.
December 13 - 14	Drilling ahead. Reached T.D. at 4:05 PM.
December 15	Ran Schlumberger Log. Plugged and Abandoned hole.

REMARKS

HYDROCARBON EVALUATION

No shows of hydrocarbon were noted in samples in this well.

The well was terminated prematurely when it was determined that its structural position was unfavorably low to its prognosticated position.

All sands penetrated are believed to be tight and/or water bearing.

OPERATIONS

Daily operations were conducted efficiently and in good spirits.

The samples were saved and taken to Rio Colorado Oil and Gas, Inc. in Denver, Colorado for deposit and storage.

Achille Vitali, Jr.
Geologist

RIO COLORADO OIL AND GAS, INC.

#3 Santa Fe Pacific 7-5
Section 5, T17N - R9W
(2310' F.N.L. & 2310' F.E.L.)
McKinley County, New Mexico

SAMPLE DESCRIPTION

(Note: Samples not lagged unless otherwise noted.)

<u>FROM</u>	<u>TO</u>	<u>IN MESA VERDE FORMATION</u>
200'	220'	Shale, very dark smoky gray, very finely carbonaceous in part, sub-waxy, soft to slightly firm and brittle.
220'	240'	Sandstone, off-white to creamy gray, fine to medium grain, angular, firm to hard, very limy and clay filled, very tight, salt and pepper with light and dark gray and tan Chert, pinkish and flesh colored grains (feldspathic?), occasional Carbon grains.
240'	260'	Sandstone, as above, very fine to fine grain with some to medium grain, loose to hard, as above.
260'	300'	Shale, medium to dark smoky gray, very finely carbonaceous in part, sub-waxy in part, silty in part, grading to Siltstone, light to medium to dark gray, very finely sandy, very argillaceous in part, occasionally finely carbonaceous.
300'	320'	Sandstone, very light to light gray, very fine to fine grain with some fine to medium grain, in part soft and friable and very argillaceous, in part hard and limy, salt and pepper, as above, scattered Carbon debris, grading to Siltstone, medium gray, soft, argillaceous and very finely sandy, finely micaceous in part.
320'	340'	50% Sandstone, as above, grading to Siltstone, as above, grading to Shale, medium gray, silty, soft, bentonitic.
340'	360'	70% Sandstone, off-white to light to medium gray, very fine to fine grain, friable to very heavy clay and argillaceous to limy and very calcareous, as above, tight, No Show, plus Siltstone and Shales as above.
360'	380'	Predominately Shale, medium to dark gray, silty in part, soft to slightly firm, bentonitic grading to Siltstone, as above.

Sample Description
#3 Santa Fe Pacific

<u>FROM</u>	<u>TO</u>	
380'	400'	Sandstone, very light to light gray, very fine grain, angular, friable to slightly firm, very heavy clay matrix, non-calcareous, some Shale streaks very carbonaceous, tight, No Show.
400'	420'	Sandstone, as above with some Shale, medium smoky gray, bentonitic, in part carbonaceous and/or silty.
420'	440'	Sandstone, light to medium gray, very fine grain to silt size, angular, friable to slightly firm, heavy clay matrix, Carbon in lamination and with much scattered debris grading to Siltstone, medium gray, carbonaceous plus heavy trace Shale, medium to dark brown gray to black, carbonaceous, pyritic in part.
440'	460'	50% Sandstone, as above and Shale, as above.
460'	480'	Shale, medium smoky gray with brown cast, soft, bentonitic, carbonaceous and silty, plus trace Sandstone, as above, plus Shale, black, carbonaceous and coaly and sandy, plus 5% Dolostone, tan to light brown, dense, hard, brittle.

POINT LOOKOUT SAND

480'	500'	Sandstone, white to light cream, very fine to fine grain, angular, firm to slightly hard, very calcareous to limy, salt and pepper, slightly glauconitic, occasional bright orange and pinkish grains, very tight, occasional Pyrite cluster.
500'	520'	trace Sandstone, as above, predominately Shale, medium smoky gray, medium to dark gray brown, bentonitic clay type, occasionally slightly carbonaceous.
520'	540'	Sandstone, light gray, very fine grain to silt size, some very fine to fine grain, angular, friable to soft and mushy, very heavy clay to very argillaceous, salt and pepper, scattered light to heavy Carbon debris in part.
540'	560'	Sandstone, light brown to rust, very fine to fine grain, angular, very heavy clay matrix, lightly glauconitic, plus some Sandstone, as above, plus heavy traces Coal, black, sooty and Carbon debris.
560'	580'	Sandstone, as above, with abundant Sandstone, off-white to cream, very fine to fine grain, friable to firm, calcareous to limy, as above, plus some Shale, dark gray, carbonaceous and trace Coal and carbonaceous debris as above.
580'	600'	Sandstone, off-white to cream, predominately very fine grain, some very fine to medium grain, firm to hard, very calcareous to limy, salt and pepper, occasionally glauconitic, occasionally micaceous, very tight.

Sample Description
#3 Santa Fe Pacific

<u>FROM</u>	<u>TO</u>	<u>SATAN TONGUE</u>
600'	700'	Sandstone, light to light medium gray, predominately very fine to silt size, soft to firmly friable, some firm, very heavy clay matrix to argillaceous, slightly calcareous to very calcareous, finely salt and pepper with Carbon particles, tight looking, interlaminated with medium gray Shale and Siltstone in part.
700'	740'	Siltstone, medium gray, very finely sandy, soft to firm, calcareous, occasionally carbonaceous grading to/and interlaminated with Shale, medium gray, silty in part, mostly bentonitic and soft, trace Dolostone, tan, hard, brittle.
740'	760'	Missed.
760'	800'	Siltstone, medium to gray, very finely sandy as above, grading to Sandstone, light to medium gray, very fine grain to silt size, argillaceous with some calcareous, all finely carbonaceous in part.
800'	900'	Siltstone, medium gray, very finely sandy, argillaceous, calcareous grading to Sandstone, medium gray, very fine grain, angular, silty and very argillaceous, occasionally finely micaceous, soft to slightly firm, slightly carbonaceous in part, heavy trace of Inocermus.
900'	920'	Sandstone, medium gray, very fine grain, angular, friable to firm, calcareous to very calcareous, finely salt and pepper, finely glauconitic, some argillaceous grading to Siltstone, as above, trace Inocermus, Fossil shell fragments.

CREVASSE CANYON SAND

920'	940'	Sandstone, light to medium gray with some cream, predominately very fine grain to fine grain with some fine to medium grain, friable with most firm to hard, calcareous to limy, salt and pepper, angular, finely glauconitic in part, tight, very heavy trace Inocermus and Fossil shell fragments.
940'	960'	Sandstone, light to medium gray, very fine grain to silt size, angular, salt and pepper, calcareous to very calcareous, argillaceous, grading to Siltstone, as above.
960'	1000'	Sandstone, very light to light gray, fine grain, ranges from very fine to medium grain, angular, friable to slightly hard, calcareous to limy, salt and pepper with light to dark Chert and tan and flesh colored grains, heavy clay matrix, finely glauconitic in part, occasionally pyritic, occasionally micaceous, all tight looking, 980-1000 foot sample has interlamination of medium gray Sandstone and Siltstone, as above.

Sample Description
#3 Santa Fe Pacific

<u>FROM</u>	<u>TO</u>	
1000'	1100'	Sandstone, very light to light gray, very fine grain with some very fine to fine grain, angular, friable to slightly firm, medium to heavy clay matrix, slightly calcareous to very calcareous, slightly salt and pepper, very slightly and finely glauconitic and micaceous in part, looks tight with some questionable porosity and permeability, occasionally finely pyritic, occasionally free Pyrite clusters, occasional trace Inoceramus (No Show).
1100'	1140'	Sandstone, very light gray, rest as above, appears to have interlamination of medium gray Shale, silty, and Siltstone, medium gray, as above.
1140'	1280'	Sandstone, very light to light gray, very fine grain to silt size, angular, friable to slightly firm, very heavy clay matrix to occasionally argillaceous, slightly calcareous to calcareous, slightly and very finely salt and pepper, occasionally slightly glauconitic, occasionally finely micaceous, tight, grading to Siltstone, light to medium gray, very finely sandy, soft to firm, slightly calcareous to calcareous, occasionally very finely micaceous, all slightly pyritic, all with some interlamination of Shale, medium to dark gray, silty, plus scattering of Carbon debris.
1280'	1340'	Siltstone, as above, grading to Sandstone, as above, plus Shale, medium to dark gray, soft to slightly firm and silty.
1340'	1400'	Sandstone, very light gray, very fine grain (some to silt size), angular, friable to firm to slightly hard, calcareous to very calcareous, slightly and very finely salt and pepper with Carbon particles, scattered Carbon debris common, white clay matrix, looks tight, No Show, some interlamination of Siltstone and Shale, as above.
1400'	1420'	Sandstone, as above.
1420'	1480'	Shale, medium to dark gray, some with brown cast, soft to slightly firm, bentonitic in part, silty in part, scattered fine Carbon debris grading to/and interlaminated with Siltstone, light to medium gray, very finely sandy, firm, calcareous, grading to Sandstone, light gray, very fine grain to silty, firm to slightly hard, very calcareous to calcareous, slightly salt and pepper, tight, plus trace Fossil shell fragments.
1480'	1500'	Shale and Siltstone, as above with increase in Sandstone, as above, firm to hard, very calcareous to limy, tight, No Show.

Sample Description
#3 Santa Fe Pacific

<u>FROM</u>	<u>TO</u>	
1500'	1520'	Sandstone, very light gray, very fine grain to silt size, angular, friable to slightly firm, calcareous, slightly argillaceous in part, finely micaceous and carbonaceous, tight, No Show, grading to Siltstone, light to medium gray, firm, calcareous.
1520'	1540'	70% Sandstone, as above, rest Shale, very dark gray to black, sub-fissile, occasionally slightly silty plus trace Inocermus.
1540'	1600'	30 to 50% Shale, as above, grading to/and interlaminated with 30 to 40% Siltstone, as above, plus 10 to 20% Sandstone, as above, plus trace Dolostone, tan, dense, brittle.
1600'	1620'	80% Sandstone, off-white to very light gray, very fine grain to silt, angular, as above, with some very fine to fine grain, angular, friable, heavy clay matrix, slightly calcareous to calcareous, looks tight, No Show.
1620'	1700'	50 to 70% Sandstone, as above, plus some Sandstone, white, very fine to fine grain, angular, clean looking, some porosity and permeability, No Show, plus Shale, medium to dark gray, soft to firm, clay type and sub-fissile, dark gray type, finely carbonaceous in part, plus heavy trace to 5% Shale, black, grading to coaly carbonaceous type, sooty, traces Pyrite clusters.
1700'	1720'	Predominately Shales as above, 10 to 15% Sandstone and Siltstone.
		<u>Drilling Break @ 1707' Massive Gallup Sand</u>
1720'	1740'	Sandstone, white, predominately fine grain, ranging from very fine to medium grain, some coarse grain, loose, angular to sub-angular with some sub-round, finely pyritic, fair to good porosity and permeability, No Show.