

RCVD OCT23'06
OIL CONS. DIV.
DIST. 3



Weatherford[®]

Drilling Services

30 039 29883

H
Final Survey Report

Surface 1730/S 2030/W
Int. BHL 2286/N 1649/W MD 4090
Tvd 3639

Need BH survey at T.D.

Williams[®]

WILLIAMS PRODUCTION COMPANY

ROSA UNIT 129 C

Prepared by: Jose A Perez

Submitted: 10/05/06

Weatherford Drilling Services
3611 Plaza East Court
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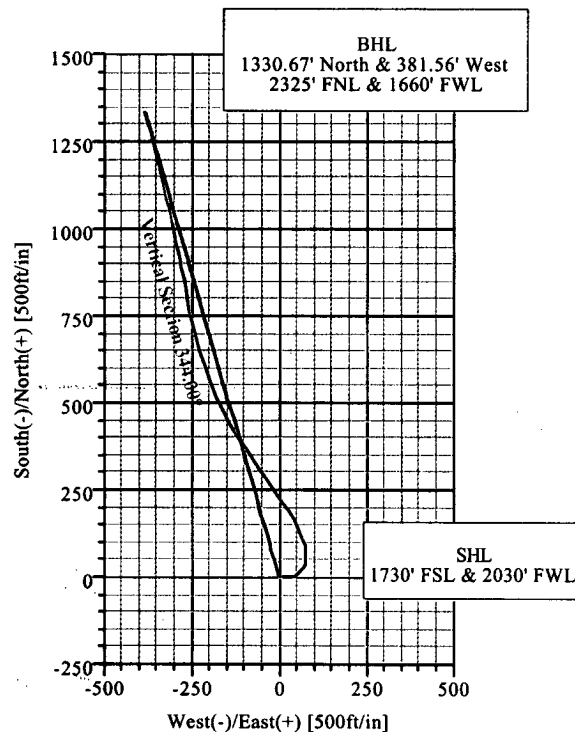
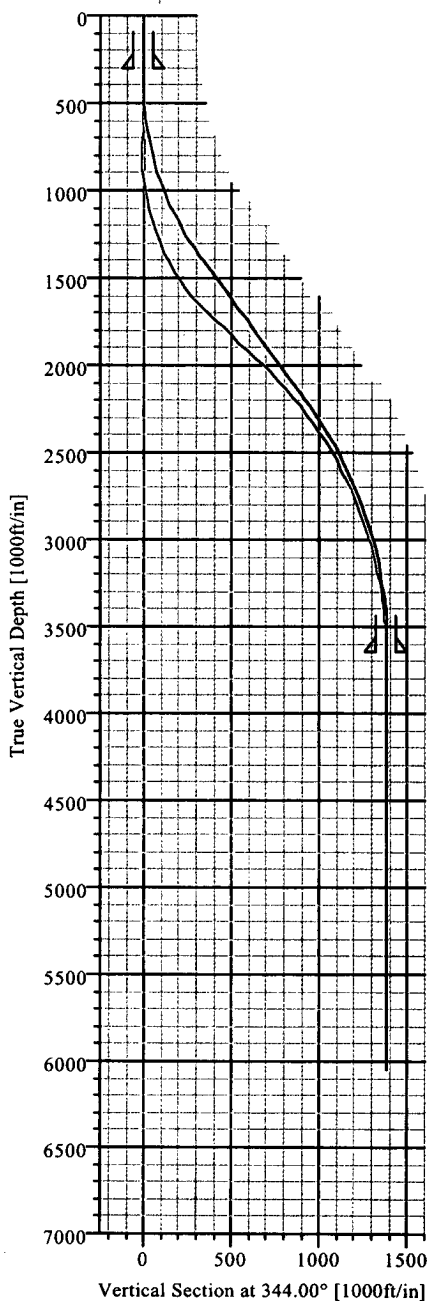
ROSA UNIT 129C
Section 34 T32N R 6W
1730' FSL & 2030' FWL
RIO ARriba COUNTY, NM
Plan vs. Actual



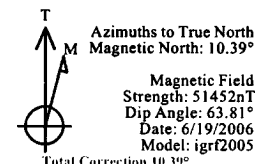
SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec Target
1	0.00	0.00	344.00	0.00	0.00	0.00	0.00	0.00	0.00
2	400.00	0.00	344.00	400.00	0.00	0.00	0.00	0.00	0.00
3	1428.57	36.00	344.00	1362.22	300.53	-86.18	3.50	344.00	312.64
4	2489.01	36.00	344.00	2220.13	899.70	-257.98	0.00	0.00	935.95
5	3964.03	0.00	344.00	3600.00	1330.67	-381.56	2.44	180.00	1384.30
6	4014.03	0.00	344.00	3650.00	1330.67	-381.56	0.00	0.00	1384.30 Int. Cs. Pt.
7	6414.03	0.00	344.00	6050.00	1330.67	-381.56	0.00	344.00	1384.30 PBHL

WELL DETAILS							
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Rosa Unit 129 C	0.00	0.00	2159530.66	612766.51	36°56'03.000N	107°26'51.000W	N/A

KB ELEVATION: 6375'
GR ELEVATION: 6361'



FORMATION TOP DETAILS			
No.	TVDPath	MDPath	Formation
1	2350.00	2645.85	Ojo Alamo
2	2460.00	2773.68	Kirtland
3	2880.00	3232.24	Fruitland
4	3140.00	3501.04	Pictured Cliffs
5	3455.00	3818.94	Lewis
6	5060.00	5424.03	Cliff House Trans.
7	5380.00	5744.03	Cliff House
8	5420.00	5784.03	Menefee
9	5600.00	5964.03	Point Lookout
10	5910.00	6274.03	Mancos



Plan: Plan #1 (Rosa Unit 129.C/1) pva
Created By: Jose Perez Date: 10/05/06
Weatherford Drilling Services
3611 Plaza East Court
Granbury TX 76049
(817) 573 8500 MAIN
(817) 573 8001 FAX



Weatherford Drilling Services Survey Report

**Weatherford**

Company: WILLIAMS PRODUCTION Date: 10/5/2006 Time: 13:59:32 Page: 1
Field: RIO ARRIBA COUNTY (NAD 27) Co-ordinate(NE) Reference: Site: Rosa Unit 129 C, True North
Site: Rosa Unit 129 C Vertical (TVD) Reference: SITE 6375.0
Well: Rosa Unit 129 C Section (VS) Reference: Well (0.00N,0.00E,344.00Azi)
Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Field: RIO ARRIBA COUNTY (NAD 27)
NEW MEXICO

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Western Zone
Coordinate System: Site Centre
Geomagnetic Model: igf2005

Site: Rosa Unit 129 C
1730' FSL & 2030' FWL
Rio Arriba County, NM

Site Position: Northing: 2159530.66 ft Latitude: 36 56 3.000 N
From: Geographic Easting: 612766.51 ft Longitude: 107 26 51.000 W
Position Uncertainty: 0.00 ft North Reference: True
Ground Level: 6361.00 ft Grid Convergence: 0.23 deg

Well: Rosa Unit 129 C
S well

Slot Name:

Well Position: +N/-S 0.00 ft Northing: 2159530.66 ft Latitude: 36 56 3.000 N
+E/-W 0.00 ft Easting: 612766.51 ft Longitude: 107 26 51.000 W
Position Uncertainty: 0.00 ft

Wellpath: 1

Pad 34

Current Datum: SITE

Height: 6375.00 ft

Drilled From: Surface

Tie-on Depth: 0.00 ft

Above System Datum: Mean Sea Level

Magnetic Data: 6/19/2006

Declination: 10.39 deg

Field Strength: 51452 nT

Mag Dip Angle: 63.81 deg

Vertical Section: Depth From (TVD)
ft

+N/-S
ft

+E/-W
ft

Direction
deg

0.00

0.00

0.00

344.00

Survey: MWD Survey

Start Date: 8/15/2006

Company: Weatherford Drilling Services

Engineer:

Tool:

Tied-to:

From Surface

Survey: MWD Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Surface Casing First MWD Surveys
334.00	0.00	0.00	334.00	0.00	0.00	0.00	0.00	0.00	0.00	
389.00	1.06	109.64	389.00	-0.17	0.48	-0.30	1.93	1.93	0.00	
419.00	1.69	108.14	418.99	-0.40	1.16	-0.71	2.10	2.10	-5.00	
481.00	3.19	98.39	480.93	-0.94	3.74	-1.93	2.50	2.42	-15.73	
541.00	4.69	84.89	540.79	-0.96	7.83	-3.08	2.92	2.50	-22.50	
603.00	6.94	80.64	602.47	-0.13	14.05	-4.00	3.69	3.63	-6.85	
665.00	6.63	99.64	664.04	-0.12	21.28	-5.98	3.64	-0.50	30.65	
727.00	7.38	96.39	725.58	-1.16	28.76	-9.04	1.37	1.21	-5.24	
787.00	8.94	80.27	784.97	-0.80	37.19	-11.02	4.59	2.60	-26.87	
849.00	10.13	63.02	846.13	2.49	46.80	-10.51	4.97	1.92	-27.82	
880.00	10.75	54.77	876.62	5.39	51.59	-9.04	5.22	2.00	-26.61	
941.00	11.94	41.14	936.44	13.43	60.39	-3.74	4.79	1.95	-22.34	
1003.00	13.06	29.02	996.98	24.38	68.01	4.69	4.59	1.81	-19.55	
1064.00	14.44	16.89	1056.24	37.69	73.57	15.96	5.23	2.26	-19.89	
1126.00	15.75	5.89	1116.11	53.46	76.68	30.26	5.07	2.11	-17.74	
1189.00	17.25	354.89	1176.53	71.28	76.72	47.37	5.49	2.38	-17.46	
1252.00	19.38	346.89	1236.34	90.77	73.52	66.99	5.22	3.38	-12.70	
1314.00	21.81	339.27	1294.39	111.57	67.11	88.75	5.83	3.92	-12.29	
1377.00	24.69	333.64	1352.27	134.31	57.12	113.36	5.77	4.57	-8.94	
1442.00	28.25	330.52	1410.45	159.87	43.51	141.69	5.88	5.48	-4.80	
1504.00	31.44	328.52	1464.22	186.44	27.84	171.55	5.39	5.15	-3.23	
1565.00	34.63	326.77	1515.36	214.52	10.03	203.44	5.46	5.23	-2.87	
1628.00	39.00	323.64	1565.79	245.47	-11.54	239.14	7.55	6.94	-4.97	



Weatherford Drilling Services Survey Report

**Weatherford**

Company: WILLIAMS PRODUCTION
Field: RIO ARRIBA COUNTY (NAD 27)
Site: Rosa Unit 129 C
Well: Rosa Unit 129 C
Wellpath: 1

Date: 10/5/2006 Time: 13:59:32 Page: 2
Co-ordinate(NE) Reference: Site: Rosa Unit 129 C, True North
Vertical (TVD) Reference: SITE 6375.0
Section (VS) Reference: Well (0.00N,0.00E,344.00Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: MWD Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1690.00	42.94	323.52	1612.59	278.18	-35.67	277.23	6.36	6.35	-0.19	
1754.00	46.44	324.77	1658.08	314.66	-62.02	319.56	5.64	5.47	1.95	
1817.00	47.63	325.64	1701.02	352.52	-88.32	363.21	2.14	1.89	1.38	
1880.00	47.63	327.02	1743.48	391.25	-114.13	407.55	1.62	0.00	2.19	
1943.00	47.56	330.27	1785.97	430.97	-138.33	452.40	3.81	-0.11	5.16	
2005.00	47.56	334.52	1827.82	471.50	-159.52	497.20	5.06	0.00	6.85	
2069.00	48.19	337.89	1870.75	514.92	-178.66	544.22	4.03	0.98	5.27	
2133.00	47.80	340.02	1913.58	559.30	-195.74	591.58	2.55	-0.61	3.33	
2196.00	47.00	341.27	1956.23	603.05	-211.11	637.88	1.94	-1.27	1.98	
2259.00	45.00	343.39	1999.99	646.22	-224.87	683.17	3.99	-3.17	3.37	
2322.00	43.94	345.14	2044.95	688.69	-236.85	727.30	2.57	-1.68	2.78	
2384.00	42.44	347.52	2090.16	729.91	-246.89	769.69	3.57	-2.42	3.84	
2447.00	41.25	348.89	2137.09	771.05	-255.48	811.60	2.38	-1.89	2.17	
2508.00	39.38	349.89	2183.60	809.84	-262.76	850.89	3.24	-3.07	1.64	
2571.00	38.06	349.02	2232.75	848.58	-269.96	890.12	2.27	-2.10	-1.38	
2633.00	35.25	348.14	2282.49	884.86	-277.28	927.01	4.61	-4.53	-1.42	
2696.00	35.56	348.27	2333.84	920.59	-284.74	963.41	0.51	0.49	0.21	
2759.00	34.69	348.52	2385.36	956.09	-292.03	999.55	1.40	-1.38	0.40	
2822.00	33.00	348.64	2437.68	990.48	-298.98	1034.53	2.68	-2.68	0.19	
2885.00	30.31	349.02	2491.31	1022.92	-305.39	1067.47	4.28	-4.27	0.60	
2946.00	29.31	347.02	2544.24	1052.58	-311.68	1097.71	2.31	-1.64	-3.28	
3009.00	27.75	346.89	2599.58	1081.89	-318.47	1127.76	2.48	-2.48	-0.21	
3072.00	25.13	347.14	2655.99	1109.22	-324.77	1155.77	4.16	-4.16	0.40	
3134.00	24.56	346.77	2712.25	1134.60	-330.65	1181.79	0.95	-0.92	-0.60	
3196.00	22.81	346.39	2769.03	1158.83	-336.43	1206.67	2.83	-2.82	-0.61	
3260.00	20.75	346.39	2828.45	1181.90	-342.02	1230.39	3.22	-3.22	0.00	
3321.00	19.06	347.89	2885.81	1202.15	-346.65	1251.13	2.89	-2.77	2.46	
3383.00	17.44	347.14	2944.69	1221.10	-350.84	1270.51	2.64	-2.61	-1.21	
3445.00	16.38	345.14	3004.01	1238.61	-355.15	1288.52	1.95	-1.71	-3.23	
3507.00	15.00	344.77	3063.70	1254.80	-359.50	1305.29	2.23	-2.23	-0.60	
3569.00	14.38	343.52	3123.67	1269.93	-363.79	1321.01	1.12	-1.00	-2.02	
3633.00	13.25	341.77	3185.82	1284.52	-368.34	1336.28	1.88	-1.77	-2.73	
3695.00	11.44	344.89	3246.38	1297.20	-372.17	1349.53	3.11	-2.92	5.03	
3758.00	8.56	347.27	3308.42	1307.81	-374.83	1360.46	4.62	-4.57	3.78	
3789.00	7.19	346.77	3339.12	1311.95	-375.78	1364.71	4.42	-4.42	-1.61	
3852.00	6.06	341.14	3401.70	1318.93	-377.76	1371.97	2.07	-1.79	-8.94	
3884.00	4.94	341.52	3433.56	1321.84	-378.74	1375.03	3.50	-3.50	1.19	
3915.00	4.44	343.02	3464.45	1324.25	-379.52	1377.56	1.66	-1.61	4.84	
3945.00	3.94	345.39	3494.37	1326.36	-380.12	1379.75	1.76	-1.67	7.90	
3977.00	3.31	349.89	3526.31	1328.33	-380.55	1381.77	2.16	-1.97	14.06	
4008.00	3.06	351.39	3557.26	1330.03	-380.84	1383.48	0.85	-0.81	4.84	
4040.00	3.06	353.64	3589.21	1331.73	-381.06	1385.17	0.38	0.00	7.03	Last MWD Survey
4090.00	3.06	353.64	3639.14	1334.38	-381.35	1387.80	0.00	0.00	0.00	Projection to TD

Annotation

MD ft	TVD ft	
334.00	334.00	Surface Casing
389.00	389.00	First MWD Surveys
4040.00	3589.21	Last MWD Survey
4090.00	3639.14	Projection to TD

UNITED STATES
DEPARTMENT OF INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICE AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or recut to a different reservoir. Use "APPLICATION TO DRILL" for permit for such proposals

5. Lease Designation and Serial No.
NMSF-078772
6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPPLICATE

1. Type of Well
Oil Well ☒ Gas Well ☐ Other ☐

7. If Unit or C.A. Agreement Designation

2. Name of Operator
WILLIAMS PRODUCTION COMPANY

8. Well Name and No.
ROSA UNIT COM #129C

3. Address and Telephone No.
PO BOX 3102 MS 25-2, TULSA, OK 74101 (918) 573-6254

9. API Well No.
50-039-29883

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
1730' FSL & 2030' FWL, NE/4 SW/4 SEC 34-T32N-R06W

10. Field and Pool, or Exploratory Area
BLANCO MV

11. County or Parish, State
RIO ARRIBA, NM

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

Notice of Intent
☒ Subsequent Report
Final Abandonment

Abandonment
Recompletion
Plugging Back
Casing Repair
Altering Casing
Other ☒ Completion

Change of Plans
New Construction
Non-Routine Fracturing
Water Shut-Off
Conversion to Injection
Dispose Water
(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

09-17-2006 MIRU, spot in equip, SDFN.

09-18-2006 RU, load hole & test 7" 23# CSG, 4 1/2" 10.5# liner & blind rams to 1600 psi 30 min, lost 20 psi, good test. Bleed off press, RU floor, tongs, PU 2 3/8" 4.7# J-55 tbg & TIH w/ 3 7/8" bit to 5200', press test pipe rams 1500 psi 15 min, bleed off press. Secure well & SDFN.

09-19-2006 PU 2 3/8" tbg & TIH, CO to 6383' PBTD, circ hole clean, RU BJ, press test 7" 23# csg & 4 1/2" 10.5# liner to 3500 psi, bleed off press, spot 500 gal 15% Hcl across PLO, TOH w/ tbg, ND BOP, NU frac valve & frac-y, RU BWWC, make junk basket run to make sure we can get in LT w/ it, POH, perf PLO bottom up in acid w/ 3 1/8" sfg, .34 dia holes, 10 grm chg, total of 55 holes, top perf 6048', bottom perf 6330', secure well, SDFN.

09-20-2006 RU BJ, BD PLO perfs from 6048' to 6330' w/ 24 bbls 15% Hcl & 100 ballsealers, flush w/ 225 bbls slick water @ 35 bpm 720 psi, good ball action press to 3300 psi, bleed down press retrieve 94 balls w/ 47 hits, frac PLO w/ slickwater, 238 bbl pad, 1633 bbls w/ 10,160# 14/30 lt prop @ .1 - .2 - .3 ppg, 119 bbls w/3,200# 20/40 brown sand @ 1 ppg, flush w/188 bbls. Secure well & SDFN. Stage #1 started @ 16:06, end @ 16:28, AIR=102 bpm, MIR=102 bpm, ATP=2335 psi, MTP=3100 psi, ISIP=110 psi, 5 min = 0 psi, all frac water contain 1 gal/1000 FRW-14.

Continued on Back

14. I hereby certify that the foregoing is true and correct

Signed Tracy Ross
Tracy Ross

Title Sr. Production Analyst

Date October 17, 2006

(This space for Federal or State office use)

Approved by _____

Title _____

Date _____

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

09-21-2006 WL set 4 ½" composite BP @ 6032', test BP 3500 psi, perf CH/Menefee bottom up w/ 2000 psi on csg w/ 3 1/8" sfg, 10 grm chg, .34 dia holes, 1 spf, total of 86 holes, top perf @ 5524', bottom perf @ 6010', BD CH/Menefee w/ 30 bbls 15% Hcl & 130 ballsealers, inj rate 34 bpm @ 1088#, baled off @ 3546#, bleed off press retrieve balls, slickwater frac CH/Menefee w/ 238 bbl pad, 1678 bbls w/ 9920# 14/30 lt prop @ .1, .2, .3 ppg, 79 bbls w/ 3020# 20/40 brown sand @ 1 ppg, flush to top perf w/ 179 bbls. Stage 2 started @ 12:51, end @ 13:15, AIR=102 bpm, MIR=90 bpm, ATP=1800 psi, MTP=1880 psi, ISIP=103 psi, 5 - 10 - 15 min = 65 psi. Flow well to pit on 2", RD BJ, well quit flowing, ND frac-y & frac valve, NU BOP, TIH w/ 3 7/8" exp mill to 3254', unload water off CH/Menefee, est 274 bbls, turn well over to flowback hand.

09-22-2006 Flow well overnight, unload water @ 3254', TIH to 5970', RU 2.5 PS, CO to BP @ 6032' w/ 12 bph mist, DO composite BP, took 1.5 hrs, could only turn swivel @ 20 - 30 rpm's due to crooked hole, push plug to 6366', unable to CO to 6383' PBTD, unload water off PLO, pull mill up into 7", turn well over to flowbackhand, total fluid rec 473 bbls.

09-23-2006 Flow PLO & CH/Menefee on blooie line, rec 163.5 bbls in 24 hr, total water rec = 636.5 bbls.

09-24-2006 Flow well on blooie line, evap pit, rec total of 690 bbls frac fluid.

09-25-2006 Flow well on blooie line overnight, 1 bph water, TIH f/LT, tag @ 6366', circ w/ 10 bph mist, unable to get remainder of plug down to PBTD @ 6383', bypass air, LD 2 jts, land 2 3/8", 4.7#, J-55 EUE tbg w/KB corr, tbg hanger, 193 jts, 1.78" SN @ 6280', 1 jt tbg, pump off mill @ 6314', top perf @ 5524', bottom perf @ 6330', ND BOP, NU tree & test to 1500 psi, held for 30 min, good test. Pump off mill @ 500 psi, flow well back up tbg, mill pumped off, turn well to production department, RD, release rig @ 1700 hrs.