

**INITIAL COMPLETION, 3/9/2006 06:30**

API/Bottom UWI	County	State/Province	Surface Legal Location	N/S Dist (ft)	N/S Ref	E/W Dist (ft)	E/W Ref
300392971200	RIO ARRIBA	NEW MEXICO	NMPM-29N-05W-19-L	2,600.00	S	700.00	W
Ground Elevation (ft)	Latitude (DMS)	Longitude (DMS)	Spud Date	Rig Release Date			
6,740.00	36° 42' 39.816" N	107° 24' 17.28" W	2/24/2006	3/6/2006			

**3/7/2006 00:00 - 3/7/2006 11:00**

**Last 24hr Summary**

DRILLING RIG MOLOC

**3/8/2006 08:00 - 3/8/2006 13:00**

**Last 24hr Summary**

CLEAN & PREP LOC FOR LOG

**3/9/2006 06:00 - 3/9/2006 15:15**

**Last 24hr Summary**

Hold PJSA meeting with crews. Talked about conducting safe logging, testing operations. Talked about possible job hazards and how to avoid those hazards. Outlined safety topics related to planned operations.  
Rig up Schlumberger Wireline unit and logging tools. Wood Group rig up testing unit to wellhead. Start into well with logging tools. Pressure up on 4 1/2" casing to 1,500 Psi to start logging. Ran CBL from 8,126' (Log tag) to 2,500'. Top of cement estimated at 2,750'. Trip out of well with tools, released pressure. Pressure test 4 1/2" casing to 6,600 Psi surface for 30 minutes. Tested good. Bleed down pressure to 0 Psi. Run TDT Log from 8,126 to 2,650' and continue with GR/CCL Log to surface. Rig down logging tools. Secured well and lease. Shutdown operations for the day.

**3/10/2006 12:00 - 3/10/2006 16:00**

**Last 24hr Summary**

Crew held PJSA on location. Dawn Trucking started hauling and setting frac tanks on wellsite.

**3/11/2006 08:00 - 3/12/2006 16:00**

**Last 24hr Summary**

**3/13/2006 08:00 - 3/13/2006 16:00**

**Last 24hr Summary**

HAUL IN FRAC TANKS

**3/14/2006 08:00 - 3/14/2006 16:00**

**Last 24hr Summary**

**3/15/2006 08:00 - 3/15/2006 16:00**

**Last 24hr Summary**

HAUL IN FRAC WATER

**3/16/2006 08:00 - 3/16/2006 16:00**

**Last 24hr Summary**

**3/17/2006 08:00 - 3/17/2006 16:00**

**Last 24hr Summary**

RU FRAC VALVE, SPOOL ASSEMBLY

**3/18/2006 08:00 - 3/18/2006 16:00**

**Last 24hr Summary**

HEAT FRAC WATER

**3/19/2006 08:00 - 3/19/2006 12:00**

**Last 24hr Summary**

PJSA meeting on location. Held PJSA with crew on location. Talked about conducting safe wireline operations. Rig up Computalog unit and perforating tools with pressure lubricator. Rig up and run in the well with 3 1/8" HSC PP 120 Degree phase with 12 g 306 Owen charges .34" diameter guns. Correlated off of TDT/GR/CCL log dated 3-9-06. Did not note any drag at casing anomaly at 6,686'. Perforated from 7,996' to 8,021' with 1 SPF, 8,045' to 8,051' with 1 SPF, and 8,062' to 8,088' with 1 SPF for a total of 60 holes. Made a total of 2 gun runs. Verified all perforations were shot. Rig down perf guns and tools from wellhead. Shut in and secured well. Will leave wireline unit and tools on location for Dakota and Mesa Verde Frac job. Secured lease. Shutdown operations for the day.

**3/20/2006 05:30 - 3/20/2006 19:00**

**Last 24hr Summary**

PJSM w/ Schlumberger, Protechnics, Computalog & Dawn Trucking. Discussed days events and ways to prevent incident. Filled out and reviewed JSA. RU Schlumberger frac iron. FRAC Dakota w/ 73,127# 20/40 Carbolite, 2,304,800 scf N2 and 1418 bbl clean fluid. SEE STIMULATION REPORT FOR DETAILS PJSM w/ Computalog. MU and RIH w/ Magnum 4" CBP and 3 1/8" SF PP 90° w/ Owen 302 10g charges w/ 0.34" dia holes. Correlate from Schlumberger GR/CCL/TDT log and marker jts @ 6753' and 7793' to get on depth. Set CBP @ 6076'. Pull up hole and perforate PLO/MEN/CH as follows: 5474'-5478', 5526'-5546', 5556'-5560', 5824'-5830', 5848'-5854', 5878'-5890', 5911'-5919', 5946'-5950', 5968'-5976' all shots are 0.50 SPF for a tot of 45 holes. RU Schlumberger frac iron. FRAC MESAVERDE w/ 200,000# 20/40 Brady, 2,271,400 scf N2 and 2307 bbl clean fluid. SEE STIMULATION REPORT FOR DETAILS RD Service companys. Move equipment off location to SJ 29-6 # 74C. FLOW BACK MV.

**3/21/2006 00:00 - 3/21/2006 00:00**

**Last 24hr Summary**

**3/22/2006 00:00 - 3/22/2006 00:00**

**Last 24hr Summary**

**3/22/2006 00:00 - 3/22/2006 00:00**

**Last 24hr Summary**

Finish flow back @ 08:00

**3/23/2006 00:00 - 3/23/2006 00:00**

**Last 24hr Summary**

Wait on completion rig

**3/24/2006 09:00 - 3/24/2006 18:00**

**Last 24hr Summary**

Move to location. Hold safety meeting with rig crew and M&R Trucking. Check LEL and location and set equipment in. Unable to spot unit because of soft location in front of wellhead. Wait on load of rock. Unload and spread rock; pack in soft area. Spot unit. Will bring out more timber on Mon. Secure location and SDFWE.

**3/25/2006 00:00 - 3/25/2006 00:00**

**Last 24hr Summary**

SDFWE

**3/26/2006 00:00 - 3/26/2006 00:00**

**Last 24hr Summary**

SDFWE

**3/27/2006 07:00 - 3/27/2006 18:00**

**Last 24hr Summary**

Hold safety meeting and write JSA. Check pressure. SICP - 340 psi. Place extra timber under front jacks on unit and rig up. Hook up flow line, pump lines and etc... Blow well down to 225 psi through 1/2" choke. Pump 25 bbls of 2% KCL, kill well, install bull plugged tbg hanger and remove frac valve and cross. Nipple up BOP and pressure test BOP per COP procedures. Rig up floor and hook up kill line and 3" flow line. Pump 25 bbls of 2% KCL water to kill well. Pull tbg hanger, pick up 2-3/8" X 1.81 ID FN with wireline plug installed, strap, pick up and run 2-3/8" tbg. Secure well and location and SDFN.

**3/28/2006 07:00 - 3/28/2006 16:30**

**Last 24hr Summary**

Hold safety meeting and write JSA. Check pressure. SICP - 350 psi. Strap, pick up and run 2-3/8" tbg. Tag fill @ 5858'. Pressure test air lines and rig up to clean out. Wait on wireline truck to pull plug, rig up unit and pull plug. Hold safety meeting to discuss near miss. Unload well and clean out to 5880'. Mist pump on air package down. Pull 8 stds to 5381', secure well and location and SDFN.

**3/29/2006 07:00 - 3/29/2006 17:30**

**Last 24hr Summary**

Hold safety meeting and write JSA. Check pressure. SICP - 400 psi; SITP - 300 psi. Blow well down to flow back tank. Blow well @ 5381' to check circ. and pressure. Circ @ 550 psi with air/mist. TIH 8 stds, install string float and blow well. Circ @ 1300 psi with air; could not circ with air/mist. TOH and remove string float, TIH to 5850. Circ @ 650 psi with air/mist. Blow well @ 5880' and wait on full opening string float. Install float and clean out from 5880 to 6070.78' (CBP). Blow well clean, TOH 12 stds -above top perfs- secure well and location and SDFN.

**3/30/2006 07:00 - 3/30/2006 18:00**

**Last 24hr Summary**

Hold safety meeting and write JSA. Check pressure. SICP - 350 psi; SITP - 350 psi. Blow well down to flow back tank and TIH to check for fill. Tag fill @ 6057' (13' of fill). Clean out from 6057' to CBP @ 6070' and blow well clean. PUH to 5850' and rig up flow line from tbg to flow back tank with 1/2" choke. Flow test Mesa Verde formation up tbg for 4-1/2 hrs to flow back tank on 1/2" choke at surface.

(FLOW TEST IS FOR ALLOCATION)

MV perfs - 5474' - 5976'

2 3/8" tbg set @ 5850'

Flow well up tbg with 1/2" choke @ surface

SICP - 320 psi

FTP - 125 psi

MV production - 825 mscf/day

0 BOPD

12 BWPD

NO SAND

Test witnessed by Andrew Chavez w/Basic Enery Services

TOH to 5381', secure well and location and SDFN.

**3/31/2006 07:00 - 3/31/2006 18:00**

**Last 24hr Summary**

Hold safety meeting and write JSA. Check pressure. SICP - 340 psi; SITP - 340 psi. Blow well down to flow back tank and TIH 11 stds to 6058' and tag fill (12'). Break circ, clean out to 6070' (CBP), and blow well clean. PUH to 5374' and hook tbg to flow back tank with 1/2" choke. Flow test Mesa Verde formation up tbg for 4-1/2 hrs to flow back tank through 1/2" choke @ surface.

(FLOW MV FOR 4-1/2 HRS FOR ENGINEERING PURPOSES ONLY. THIS IS NOT A MV ALLOCATION TEST)

MV perms: 5474' - 5976'

2 -3/8" tbg set @ 5374'

Flow well up tbg with 1/2" choke @ surface

SICP - 300 psi

FTP - 105 psi

MV prod -

0 BOPD

2 BWPD

NO SAND

Test witnessed by Andrew Chavez w/Basic Energy Service

Secure well and location and SDFWE.

**4/1/2006 00:00 - 4/1/2006 00:00**

**Last 24hr Summary**

SDFWE

**4/2/2006 00:00 - 4/2/2006 00:00**

**Last 24hr Summary**

SDFWE

**4/3/2006 07:00 - 4/3/2006 18:00**

**Last 24hr Summary**

SAFETY MEETING-SICP 360 PSIG, SITP 340 PSIG, BLEED WELL DOWN TO FLOW BACK TANK. RU H&H SL UNIT. SET PLUG IN F NIPPLE, BLED DOWN TBG. RD H&H.TOH WITH 86 STDS OF 2-3/8 TBG, F NIPPLE WITH PLUG IN IT AND MULE SHOE.MU 3-7/8 CONE BITANDBIT SUB. KILL WELL WITH 25 BBLS OF 2% KCL.TIH WITH 97 STDS OF 2-3/8 TBG AND BHA. TAG FILL @ 6055' (15' OF FILL). RU 2.5 POWER SWIVEL, PRESSURE TEST AIR LINES, BREAK CIRCULATION WITH AIR MIST. CLEAN OUT TO CBP @ 6070'.DRILLED OUT CBP @ 6070' HANG SWIVEL BACK. PUH ABOVE PERFS. SECURE WELL SDFN

**4/4/2006 07:00 - 4/4/2006 18:00**

**Last 24hr Summary**

SAFETY MEETING-SICP 500 PSIG, BLEED WELL DOWN TO FLOW BACK TANK. TIH WITH 12 STDS OF 2-3/8 TBG, TALLY AND PICKED UP, 64 JTS,TAG FILL @ 8076 (50' OF FILL). RU 2.5 POWER SWIVEL, BREAK CIRCULATION WITH AIR MIST,CLEAN OUT TO PBTD @ 8126'.BLOW WELL @ PBTD WITH AIR MIST. MAKING HEAVY TO LIGHT SAND. RD POWER SWIVEL, PUH ABOVE PERFORATIONS. SECURE WELL SDFN.

**4/5/2006 07:00 - 4/5/2006 18:00**

**Last 24hr Summary**

SAFETY MEETING-SICP 450 PSIG, BLEED WELL DOWN TO FLOW BACK TANK. RIH WITH 42 STDS OF 2-3/8 TBG, TAG FILL @ 8122' (4' OF FILL). BREAK CIRCULATION WITH AIR MIST,CLEAN OUT TO PBTD @ 8126'. BLOW WELL WITH AIR FOR 3 HRS. CLEAN RETURNS. TOH WITH 128 STDS OF 2-3/8 TBG, BIT SUB AND BIT. MU MULE SHOE, AND 1.81 F NIPLE WITH WIRELINE PLUG IN IT, KILL WELL WITH 20 BBLS OF 2% KCL. TIH WITH 66 STDS. SHUT DOWN OPERATIONS DUE TO HIGH WINDS. SDFN

**4/6/2006 07:00 - 4/6/2006 18:00**

**Last 24hr Summary**

SAFETY MEETING-SICP 450 PSIG, BLEED WELL DOWN TO FLOW BACK TANK. RIH WITH 22 STDS OF 2-3/8 TBG. RU H&H SL UNIT. RIH AND RETRIEVE PLUG, TOH WITH PLUG. MU AND RIH W/ EOT LOCATOR. FIND EOT. TBG SET @ 5368'. (106' ABOVE TOP MV PERF) POOH RU PROTECHNICS LOGGING TOOLS AND RIH TO 6026', GET STATIC TEMPERATURE AND PRESSURE. (BHT= 182F BHP = 483#) OPEN WELL FLOWING UP TBG. W/ 1/2" CHOKE @ SURFACE. PSI STABILIZED @ FTP= 150#, SICP= 380#. LOG ACROSS MV FORMATION F/6026' -5424. POOH W/ TOOLS.RETRIEVE DATA. GOOD DATA. MU PLUG . RIH AND SET PLUG IN F-NIPPLE, TOH RD H&H SL. RIH DRIFTING 44 STDS OF 2-3/8 TBG, TAG FILL @ 8124' (2' OF FILL). BREAK CIRCULATION WITH AIR MIST,CLEAN OUT TO PBTD @ 8126'. SHUT DOWN AIR,PUH WITH 4 STDS, EOT @ 7875', SECURE WELL SDFN.

4/7/2006 07:00 - 4/7/2006 19:00

## Last 24hr Summary

SAFETY MEETING-SICP 450 PSIG. RU H&H SL UNIT. RIH AND RETRIEVE PLUG, TOH WITH PLUG. MU AND RIH W/ EOT LOCATOR. FIND EOT. TBG SET @ 7880'. CONTINUE IN THE HOLE TAG PBTD @ 8126' (NO FILL) POOH RU PROTECHNICS LOGGING TOOLS AND RIH TO 7946', GET STATIC TEMPERATURE AND PRESSURE.(BHT= F BHP = #) OPEN WELL FLOWING UP TBG. W/ 1/2" CHOKE @ SURFACE. PSI STABILIZED @ FTP= 135 #, SICP= 380#. LOG ACROSS DK FORMATION F/8113' -7946'. POOH W/ TOOLS.RETRIEVE DATA. GOOD DATA.

## RESULTS OF DK PRODUCTION LOG TEST DATA:

DK GAS= 1000 MCF/D

OIL= 0 BPD

WATER= 6.1 BPD.

RIH W/ SPECTRA SCAN, LOG ACROSS DK INTERVAL F/ 7996-8088 . RETRIEVE DATA, RD H & H. KILL TBG W/ 5 BBLS PF 2% KCL.RIH PICKING UP AND DRIFTING 8 JTS, TAG PBTD @ 8126' (NO FILL) LAY DOWN 4 JTS. LANDED WELL WITH 257 JTS OF 2-3/8 TBG 1. 81 F-NIPPLE AND MULE SHOE, EOT @ 8003' KB, SN @ 8002'. RD FLOOR,ND BOP, NU MASTER VALVE. UNLOAD HOLE W/ AIR. OPEN WELL TO PURGE AIR FROM TUBULARS. RD UNIT AND EQUIPMENT. TURN OVER TO OPERATOR AND EPNG FOR PRODUCTION. PREPARED TO MOVE . JOB COMPLETED

Well Name: San Juan 29-5 #51F  
 API #: 30-039-29712  
 Location: 2600' FSL & 700' FWL  
Sec. 19 - T29N - R5W  
Rio Arriba County, NM  
 Elevation: 6740' GL (above MSL)  
 Drl Rig RKB: 13' above Ground Level  
 Datum: Drl Rig RKB = 13' above GL

Patterson Rig: #747  
 Spud: 24-Feb-06  
 Spud Time: 8:30  
 Date TD Reached: 5-Mar-06  
 Release Drl Rig: 7-Mar-06  
 Release Time: 20:00

11" 3M x 7 1/16" 5M Tubing Head  
 11" 3M x 11" 3M Casing Spool  
 9-5/8" 8 RD x 11" 3M Casing Head

**Surface Casing** Date set: 24-Feb-06  
 Size 9 5/8 in  
 Set at 232 ft # Jnts: 5  
 Wt. 32.3 ppf Grade H-40  
 Hole Size 12 1/4 in Conn STC  
 Excess Cmt 125 %  
 T.O.C. SURFACE

☒ New  
☐ Used

Csg Shoe 232 ft  
 TD of 12-1/4" hole 240 ft

Notified BLM @ 16:30 hrs on 22-Feb-06  
 Notified NMOCD @ 16:30 hrs on 22-Feb-06  
 30 min Casing Test at 1000 psi on 25-Feb-06

**Intermediate Casing** Date set: 1-Mar-06  
 Size 7 in 93 jts  
 Set at 3967 ft 0 pups  
 Wt. 20 ppf Grade J-55  
 Hole Size 8 3/4 in Conn STC  
 Excess Cmt 150 % Top of Float Collar 3922 ft  
 T.O.C. SURFACE Bottom of Casing Shoe 3967 ft  
 Pup @        ft TD of 8-3/4" Hole 3977 ft  
 Pup @        ft

☒ New  
☐ Used

Notified BLM @        hrs on         
 Notified NMOCD @        hrs on         
 30 min Casing Test at 1800 psi on 02-Mar-06

**Production Casing:** Date set: 6-Mar-06  
 Size 4 1/2 in 187 jts  
 Set at 8151 ft 2 pups  
 Wt. 11.6 ppf Grade N-80  
 Hole Size 6 1/4 in Conn LTC  
 Excess Cmt 50 % Top of Float Collar 8147 ft  
 T.O.C. (est) 3767 Bottom of Casing Shoe 8151 ft  
 Marker Jt @ 7793 ft TD of 8-3/4" Hole 8153 ft  
 Marker Jt @ 5346 ft  
 Marker Jt @        ft  
 Marker Jt @        ft

☒ New  
☐ Used

Notified BLM @        hrs on         
 Notified NMOCD @        hrs on       

Top of Float Collar 8147 ft  
 Bottom of Casing Shoe 8151 ft

TD of 8-3/4" Hole: 8153 ft

**Surface Cement**

Date cmt'd: 24-Feb-06  
 Lead : 150 sx Class G Cement  
 + 3% S001 Calcium Chloride  
 + 0.25 lb/sx D130 Polyester Flakes  
 1.16 cuft/sx, 174.0 cuft slurry at 15.8 ppg  
 Displacement: 15.0 bbls fresh wtr  
 Bumped Plug at: 17:03 hrs w/ 451 psi  
 Final Circ Press: 109 psi @ 1.7 bpm  
 Returns during job: YES  
 CMT Returns to surface: 14 bbls  
 Floats Held: No floats used  
 W.O.C. for 6.00 hrs (plug bump to start NU BOP)  
 W.O.C. for 8.50 hrs (plug bump to test csg)

**Intermediate Cement**

Date cmt'd: 1-Mar-06  
 Lead : 435 sx Class G Cement  
 + 3% D079 Extender  
 + 0.20% D046 Antifoam  
 + 1.0 lb/bbl CemNet  
 2.63 cuft/sx, 1144.05 cuft slurry at 11.7 ppg  
 Tail : 245 sx 50/50 POZ : Class G Cement  
 + 2% D020 Bentonite  
 + 5.0 lb/sx D024 Gilsonite Extender  
 + 2% S001 Calcium Chloride  
 + 0.15% D065 Dispersant  
 + 0.20% D046 Antifoam  
 + 1.0 lb/bbl CemNet  
 1.28 cuft/sx, 313.6 cuft slurry at 13.5 ppg  
 Displacement: 158.4 bbls  
 Bumped Plug at: 14:30 hrs w/ 1146 psi  
 Final Circ Press: 719 psi @ 2.2 bpm  
 Returns during job: YES  
 CMT Returns to surface: 5 bbls  
 Floats Held: X Yes    No  
 W.O.C. for NA hrs (plug bump to start NU BOP)  
 W.O.C. for 9.50 hrs (plug bump to test csg)

**Production Cement**

Date cmt'd: 6-Mar-06  
 Cement : 470 sx 50/50 POZ : Class G Cement  
 + 0.25 lb/sx D130 Polyester Flakes  
 + 3% D020 Bentonite  
 + 1.00 lb/sx D024 Gilsonite Extender  
 + 0.25% D167 Fluid Loss  
 + 0.15% D065 Dispersant  
 + 0.10% D800 Retarder  
 + 0.10% D046 Antifoam  
 + 3.5 lb/sx Phenoseal  
 1.45 cuft/sx, 681.5 cuft slurry at 13.0 ppg  
 Displacement: 126.3 bbls  
 Bumped Plug: 17:05 hrs w/ 1984 psi  
 Final Circ Press: 1292 psi @ 1.9 bpm  
 Returns during job: None Planned  
 CMT Returns to surface: None Planned  
 Floats Held: X Yes    No

Schematic prepared by:  
 Michael P. Neuschafer, Drilling Engineer  
 7-March-2006

**COMMENTS:**

9-5/8" Surf:	No float equipment was run. Ran a guide shoe. Displaced top wiper plug with water. Shut in casing head and WOC before backing out landing jt. CENTRALIZERS @ 222', 144', 101', 59'. Total: 4
7" Intermediate	DISPLACED W/ 158.4 BBLs. FRESH WATER. CENTRALIZERS @ 3957', 3879', 3799', 3720', 3641', 3557', 230', 187', 58'. TURBOLIZERS @ 3004', 2962', 2919', 2876', 2833'. Total: 9
4-1/2" Prod.	NONE. Total: 5