Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr , Hobbs, NM 88240
District II
1301 W Grand Ave , Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
June 19, 2008

WELL API NO. 30-045-33583	
5. Indicate Type of Lease STATE ☐ FEE ☒	
6. State Oil & Gas Lease No. 25016	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name RIO BRAVO ~~27~~
1. Type of Well: Oil Well ☐ Gas Well ☒ Other	8. Well Number 05
2. Name of Operator NOBLE ENERGY, INC.	9. OGRID Number 234550
3. Address of Operator 5802 US HIGHWAY 64 FARMINGTON, NEW MEXICO 87041	10. Pool name or Wildcat Mesa Verde (Cliff House)
4. Well Location Unit Letter E : 1505 feet from the NORTH line and 1245 feet from the WEST line Section 27 Township 31N Range 13W NMPM SAN JUAN County, NEW MEXICO	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 5673' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: CONVERT GAS WELL TO A SALT WATER INJECTION WELL ☒		OTHER:	☐

RCVD JUN 15 '10
OIL CONS. DIV.
DIST. 3

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

NOBLE ENERGY, INC. RESPECTFULLY SUBMITS THE FOLLOWING PROCEDURE FOR THE CONVERSION OF THE SUBJECT WELL FROM AN UNECONOMIC PRODUCING GAS WELL INTO A SALT WATER INJECTION WELL.

THE ATTACHED PROCEDURE IS SUBMITTED FOR THE STEP RATE INJECTIVITY TEST OF THE CLIFF HOUSE FORMATION OF THE MESA VERDE.

NOBLE ENERGY, INC. proposes the procedure to begin on June 17, 2010. This will serve as official written notice to the NMOCD.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Billie Maez TITLE REGULATORY COMPLIANCE DATE 06/15/2010

Type or print name **BILLIE MAEZ** E-mail address: bmaez@nobleenergyinc.com PHONE: 505-632-8056

For State Use Only

APPROVED BY: Kelly G. Roberts TITLE Deputy Oil & Gas Inspector, District #3 DATE JUN 17 2010

Conditions of Approval (if any): STEP INTERVAL TO BE 15 MINUTES MINIMUM

Proposal No: 422151042D

Noble Energy Inc
RIO BRAVO 27-05

API # 30-045-33583-0000
BASIN Field
Sec 27, T31N, R 13W
San Juan County, New Mexico
June 15, 2010

Acidizing Proposal

Prepared for:
Billy Maez
Noble Energy

Prepared by:
MATTHEW A POST
District Technical Supervisor
Farmington, New Mexico

THE BLUE WELLBORE℠
Makes better wells

Service Point:
Farmington
Bus Phone: (505) 327-6222
Fax: (505) 327-5766

Service Representatives:
Harry Mitchell
Senior Sales Rep
Farmington, New Mexico

Gr4105

Operator Name: Noble Energy Inc
Well Name: RIO BRAVO 27-05
Job Description: Injection test
Date: June 15, 2010

Proposal No: 422151042D

JOB AT A GLANCE

Surface Treating Pressure (max)		836 psi
Total Rate (max)		7.00 bpm
Estimated Pump Time (HH:MM)		07:00
Diagnostic	63,962 gals	2% KCL water

Starting pump rate will be 0.5 bpm and increased at 0.25 bpm each 15 minutes. The Expected maximum rate is 8
bpm at about 750 psi. The maximum pressure ie 750 PSI. Top connection is 2 7/8 EUE.

Record the job in TMV and send data (time, rate, pressure, cal bhtp to denver every hour)
email: (Jrim@nobleenergyinc.com, brothe@nobleenergyinc.com)

Operator Name: Noble Energy Inc
Well Name: RIO BRAVO 27-05
Job Description: Injection test
Date: June 15, 2010

Proposal No: 422151042D

WELL DATA

RESERVOIR DATA

Formation	Mesa Verde
Formation Type	Sandstone
Depth to Middle Perforation	3,887 ft
Fracture Gradient	0.45 psi/ft
Bottom Hole Fracture Pressure	1,749 psi
Bottom Hole Static Temperature	111 ° F

PERFORATED INTERVAL

DEPTH(ft)		Shots per Foot	Perf Diameter (in)	Total Perfs
MEASURED	TRUE VERTICAL			
3,487 - 3,517	3,487 - 3,517	4	0.34	120
3,536 - 3,561	3,536 - 3,561	4	0.34	100
4,200 - 4,286	4,200 - 4,286	4	0.34	344

Total Number of Perforations	564
Total Feet Perforated	141 ft

TUBULAR GEOMETRY

				Top	Bottom
Casing	7" O.D.	(6.366" .I.D)	23 #	0	4,313
Tubing	2 7/8" O.D.	(2.441" .I.D)	6.5 #	0	3,480

End of Tubing	3,480 ft
Pump Via	Tubing

Review actual depth's and tubular sizes with Company Rep on location.

Operator Name: Noble Energy Inc
Well Name: RIO BRAVO 27-05
Job Description: Injection test
Date: June 15, 2010

Proposal No: 422151042D

FLUID SPECIFICATIONS

Diagnostic: 2% KCL water

63,962 Gallons

noble energy

Test Mesa Verde and Perform Step-Rate Test

WELL NAME:	Rio Bravo 27-05	**DATE:**	4/6/2010
LOCATION:	NE/SW/NW Sec 27 T31N R13W	**API:**	30-045-33583
COUNTY:	San Juan		
STATE:	New Mexico		
FIELD:	La Plata		
OBJECTIVE:	Perf Cliffhouse & Point Lookout		
TARGET FORMATION:	PL & CH - Mesaverde Group	**DEPTH:**	3487-4286'
COMPLETION STATUS:	P&A'd - FC / Dakota		
TOTAL DEPTH:	6675'		
PLUG BACK TD:	4313'		

DISCUSSION: This well was spud on 10/2/2006 and was initially a multiple completion in the Dakota (6442' - 6544') and the Fruitland Coal (1630' - 1796'). The well will be converted into a MV disposal well. A water sample is needed to conduct a water analysis on the Point Lookout to obtain authorization to inject.

PROCEDURE:

Perforate PL & CH and Swab PL to Capture Water Sample

1) Install and test rig anchors.Comply with all NMOCD, BLM, & Noble Energy's safety rules and regulations.
2) MIRU workover rig.
3) ND wellhead and NU BOP. Test 3k psi BOP.
4) Circulate and cleanout wellbore to PBTD of 4313'.
5) RU wireline
6) RIH with wireline and 3 1/8" Slick Perf gun and perforate Point Lookout @ 4200' - 4286' @ 4 spf, 120° phase, total of 344 shots. POOH.
7) RIH with wireline and 3 1/8" Slick Perf gun and perforate Cliffhouse 3536- 3561' @ 4 spf, 120° phase, total of 100 shots. POOH.
8) RIH with wireline and 3 1/8" Slick Perf gun and perforate Cliffhouse 3487 - 3517' @ 4 spf, 120° phase, total of 120 shots. POOH.
9) RD wireline.
10) PU retrievable 7" BP and packer, TIH.
11) Set RBP @ 4310'.
12) Set packer @ 4150'.
13) Swab Point Lookout with WO rig until clean formation water sample is achieved. Catch fluid sample and record fluid and gas entry.

14) Release packer and RBP and TOH.

15) Send sample in for analysis.

16) Wait on fluid sample results before proceeding.

17) RU service company for injectivity step rate test

Step Rate Test and Injection

18) MIRU pump and equipment to perform Step Rate Test (see attached step rate procedure from the service company)

19) Start step up rate at an increment of 1/4 BPM and record pressure, time, flowrate and friction pressure every 15 min. Send raw data every hour to the Denver office (jrim@nobleenergyinc.com, brothe@nobleenergyinc.com)

20) In the test data, look for parting pressure. Make sure the surface pressure does not exceed Max Pressure (indicated on the Sundry Notice)

21) Continue injectivity test until Denver calls to stop.

22) After the test is complete, RD pump and equipment. Release packer and BP.

23) Pick up coated tubing and Retrievable Packer and RIH to 3450'. Set Retrievable Packer at 3450'.

24) Start injecting disposal water into the formation and monitor pressure and rate for 1 hour.

25) ND BOP and NU Wellhead.

26) RD Workover rig and Move out.

Operator Name: Noble Energy Inc
Well Name: RIO BRAVO 27-05
Job Description: Injection test
Date: June 15, 2010

Proposal No: 422151042D

ACID TREATMENT SCHEDULE

INPUT PARAMETERS

TVD Depth (Mid Perforation)	3,887 ft
MD Depth (Mid Perforation)	3,887 ft
Perforations Number	564
Perforation Diameter	0.340 in
Bottom Hole Frac Pressure	1,749 psi
Bottom Hole Static Temperature	111 ° F

				Top	Bottom
Casing	7" O.D.	(6.366" I.D.)	23 #	0	4,313
Tubing	2 7/8" O.D.	(2.441" I.D.)	6.5 #	0	3,480

CALCULATED RATES, PRESSURES & HHP REQUIREMENTS

	Maximum	Minimum	Average
Surface Treating Pressure (psi)	836	336	569
Slurry Rate (bpm)	7.0	4.0	5.5
Slurry Hydraulic Horsepower	144	33	77

Operator Name: Noble Energy Inc
Well Name: RIO BRAVO 27-05
Job Description: Injection test
Date: June 15, 2010

Proposal No: 422151042D

ACID TREATMENT SCHEDULE

PROCEDURE

stage	Fluid		Diverting Agents				
	Type	Volume (gal)	Conc. (pda)	Type	Stage (volume)	Cum (lbs)	Cum (b.s.)
1	2% KCL water	158					
2	2% KCL water	315					
3	2% KCL water	474					
4	2% KCL water	630					
5	2% KCL water	789					
6	2% KCL water	945					
7	2% KCL water	1104					
8	2% KCL water	1260					
9	2% KCL water	1419					
10	2% KCL water	1575					
11	2% KCL water	1734					
12	2% KCL water	1890					
13	2% KCL water	2049					
14	2% KCL water	2205					
15	2% KCL water	2364					
16	2% KCL water	2520					
17	2% KCL water	2679					
18	2% KCL water	2835					
19	2% KCL water	2994					
20	2% KCL water	3150					
21	2% KCL water	3309					
22	2% KCL water	3465					
23	2% KCL water	3624					
24	2% KCL water	3780					
25	2% KCL water	3936					
26	2% KCL water	4095					
27	2% KCL water	4254					
28	2% KCL water	4410					
Total		63962					

Operator Name: Noble Energy Inc
Well Name: RIO BRAVO 27-05
Job Description: Injection test
Date: June 15, 2010

Proposal No: 422151042D

ACID TREATMENT SCHEDULE

TREATMENT SCHEDULE

stage	Surface Treating Pressure (psi)	Rates			Volume				Stage Pump Time hh:mm:ss
		Slurry (bpm)	Clean Fluid (bpm)	Divertor Rate (lb/min)	Slurry		Fluid		
					Stage (bbls)	Cum. (bbls)	Stage (bbls)	Cum. (bbls)	
1	49	0.3	0.3		3.8	3.8	3.8	3.8	00:15:02
2	54	0.5	0.5		7.5	11.3	7.5	11.3	00:15:00
3	62	0.8	0.8		11.3	22.5	11.3	22.5	00:15:02
4	72	1.0	1.0		15.0	37.5	15.0	37.5	00:15:00
5	83	1.3	1.3		18.8	56.3	18.8	56.3	00:15:01
6	97	1.5	1.5		22.5	78.8	22.5	78.8	00:15:00
7	113	1.8	1.8		26.3	105.1	26.3	105.1	00:15:01
8	131	2.0	2.0		30.0	135.1	30.0	135.1	00:15:00
9	150	2.3	2.3		33.8	168.9	33.8	168.9	00:15:00
10	172	2.5	2.5		37.5	206.4	37.5	206.4	00:15:00
11	195	2.8	2.8		41.3	247.7	41.3	247.7	00:15:00
12	219	3.0	3.0		45.0	292.7	45.0	292.7	00:15:00
13	246	3.3	3.3		48.8	341.5	48.8	341.5	00:15:00
14	274	3.5	3.5		52.5	394.0	52.5	394.0	00:15:00
15	304	3.8	3.8		56.3	450.3	56.3	450.3	00:15:00
16	336	4.0	4.0		60.0	510.3	60.0	510.3	00:15:00
17	369	4.3	4.3		63.8	574.0	63.8	574.0	00:15:00
18	403	4.5	4.5		67.5	641.5	67.5	641.5	00:15:00
19	440	4.8	4.8		71.3	712.8	71.3	712.8	00:15:00
20	478	5.0	5.0		75.0	787.8	75.0	787.8	00:15:00
21	517	5.3	5.3		78.8	866.6	78.8	866.6	00:15:00
22	558	5.5	5.5		82.5	949.1	82.5	949.1	00:15:00
23	600	5.8	5.8		86.3	1035.4	86.3	1035.4	00:15:00
24	644	6.0	6.0		90.0	1125.4	90.0	1125.4	00:15:00
25	690	6.3	6.3		93.7	1219.1	93.7	1219.1	00:14:59
26	737	6.5	6.5		97.5	1316.6	97.5	1316.6	00:15:00
27	786	6.8	6.8		101.3	1417.9	101.3	1417.9	00:15:00
28	836	7.0	7.0		105.0	1522.9	105.0	1522.9	00:15:00
								Total Pump Time:	07:00:13

Operator Name: Noble Energy Inc
Well Name: RIO BRAVO 27-05
Job Description: Injection test
Date: June 15, 2010

Proposal No: 422151042D

ACID TREATMENT SCHEDULE

Starting pump rate will be 0.5 bpm and increased at 0.25 bpm each ~~5~~ 15 minutes. The Expected maximum rate is 8
bpm at about 750 psi. The maximum pressure ie 750 PSI. Top connection is 2 7/8 EUE.

Record the job in TMV and send data (time, rate, pressure, cal bhtp to denver every hour)
email: (Jrim@nobleenergyinc.com, brothe@nobleenergyinc.com)

Operator Name: Noble Energy Inc
Well Name: RIO BRAVO 27-05
Job Description: Injection test
Date: June 15, 2010

Proposal No: 422151042D

PRICE ESTIMATE

Service Charges

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
1	ea	Personnel Surcharge - Acid Svc	152.00	152.00	0.0	152.00
		Service Charges Subtotal:		$152.00		$152.00

Equipment

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
1	2hrs	Acid Pump, 0- 2500 psi	4,650.00	4,650.00	70.0	1,395.00
6	hrs	Acid Pump, 0- 2500 psi, after init	760.00	4,560.00	70.0	1,368.00
1	job	Data Acquisition, Frac, Standard	4,575.00	4,575.00	70.0	1,372.50
1	day	Flowmeter or Viscometer	198.50	198.50	70.0	59.55
30	miles	Mileage, Heavy Vehicle	8.55	256.50	70.0	76.95
60	miles	Mileage, Auto, Pick-Up or Treating Van	4.83	289.80	70.0	86.94
		Equipment Subtotal:		$14,529.80		$4,358.94
		TOTAL:		**$14,681.80**		**$4,510.94**

Notes

Actual mileage will be charged.

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.
The technical data contained in this proposal is based on the best information available at the time of writing and is subject to further analysis and testing. The pricing data contained in this proposal are estimates only and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties.
This quotation is based on BJ Services Company being awarded the work on a first call basis and within thirty (30) days of the proposal date. These prices will be subject to review if the work is done after thirty (30) days from the proposal date, or on a second or third call basis.

CONDITIONS

BJ Services' performance of services and sale of materials is expressly conditioned upon the applicability of the Terms and Conditions contained in the current BJ Services Price Book. The Terms and Conditions include, among other things, an indemnity in favor of BJ Services from Customer for damage to the well bore, reservoir damage, loss of the hole, blowouts and loss of control of the well, even if caused by the negligence or other fault of BJ Services. The Terms and Conditions also limit the warranties provided by the BJ Services and the remedies to which Customer may be entitled in the event of a breach of warranty by BJ Services. For these reasons, we strongly recommend that you carefully review a copy of the Terms and Conditions. **If you do not have a copy of the BJ Services Price Book, you can view the Terms and Conditions on BJ Services Web Site, www.bjservices.com. By requesting that BJ Services perform the services described herein, Customer acknowledges that such Terms and Conditions are applicable to the services. Further, by requesting the services, Customer warrants that its representative on the well location or other service site will be fully authorized to acknowledge such Terms and Conditions by executing a Field Receipt or other document presented by BJ Services containing such Terms and Conditions.**

In the event that Customer and BJ Services have executed a Master Services Agreement covering the work to be performed, such Master Services Agreement shall govern in place of the Terms and
Conditions. If you are interested in entering into Master Services Agreement with BJ Services, please contact us through the "Go BJ" button on the BJ Services Web Site.

Proposal No: 422151042D

End of Report

noble energy

Perforate & Test Mesa Verde and Perform Step-Rate Test

WELL NAME:	Rio Bravo 27-05	**DATE:**	4/8/2010
LOCATION:	NE/SW/NW Sec 27 T31N R13W	**API:**	30-045-33583
COUNTY:	San Juan		
STATE:	New Mexico		
FIELD:	La Plata		
OBJECTIVE:	Perf Cliffhouse & Point Lookout		
TARGET FORMATION:	PL & CH - Mesaverde Group	**DEPTH:**	3487-4286'
COMPLETION STATUS:	P&A'd - FC / Dakota		
TOTAL DEPTH:	6675'		
PLUG BACK TD:	4313'		

DISCUSSION: This well was spud on 10/2/2006 and was initially a multiple completion in the Dakota (6442' - 6544') and the Fruitland Coal (1630' - 1796'). The well will be converted into a MV disposal well. A water sample is needed to conduct a water analysis on the Point Lookout to obtain authorization to inject.

PROCEDURE:

Perforate & Swab PL to Capture and Analyze Water Sample & Gas Presence, then Perforate CH

1) Install and test rig anchors.Comply with all NMOCD, BLM, & Noble Energy's safety rules and regulations.
2) MIRU workover rig.
3) ND wellhead and NU BOP. Test 3k psi BOP.
4) Circulate and cleanout wellbore to PBTD of 4313'.
5) RU wireline
6) RIH with wireline and 3 1/8" Slick Perf gun and perforate Point Lookout @ 4200' - 4286' @ 4 spf, 120° phase, total of 344 shots. POOH.
7) RD wireline.
8) PU packer, TIH.
9) Set packer @ 4150'.
10) Swab Point Lookout with WO rig until clean formation water sample is achieved. Catch fluid sample and record fluid and gas entry through duration of swabbing.
11) Release packer and TOH.
12) Send sample in for analysis.

13) Wait on fluid sample results before proceeding. If fluid sample TDS/gas produced from PL is satisfactory, continue with perforating Cliffhouse. If not, prepare plan to plug back Point Lookout, then perforate Cliffhouse.

14) RU wireline.

15) RIH with wireline and 3 1/8" Slick Perf gun and perforate Cliffhouse 3536- 3561' @ 4 spf, 120° phase, total of 100 shots. POOH.

16) RIH with wireline and 3 1/8" Slick Perf gun and perforate Cliffhouse 3487 - 3517' @ 4 spf, 120° phase, total of 120 shots. POOH.

17) RD wireline.

18) RU service company for injectivity step rate test

Step Rate Test and Injection

19) MIRU pump and equipment to perform Step Rate Test (see attached step rate procedure from the service company)

20) Start step up rate at an increment of 1/4 BPM and record pressure, time, flowrate and friction pressure every 15 min. Send raw data every hour to the Denver office (jrim@nobleenergyinc.com, brothe@nobleenergyinc.com)

21) In the test data, look for parting pressure. Make sure the surface pressure does not exceed Max Pressure (indicated on the Sundry Notice)

22) Continue injectivity test until Denver calls to stop.

23) After the test is complete, RD pump and equipment. Release packer and BP.

24) Pick up coated tubing and Retrievable Packer and RIH to 3450'. Set Retrievable Packer at 3450'.

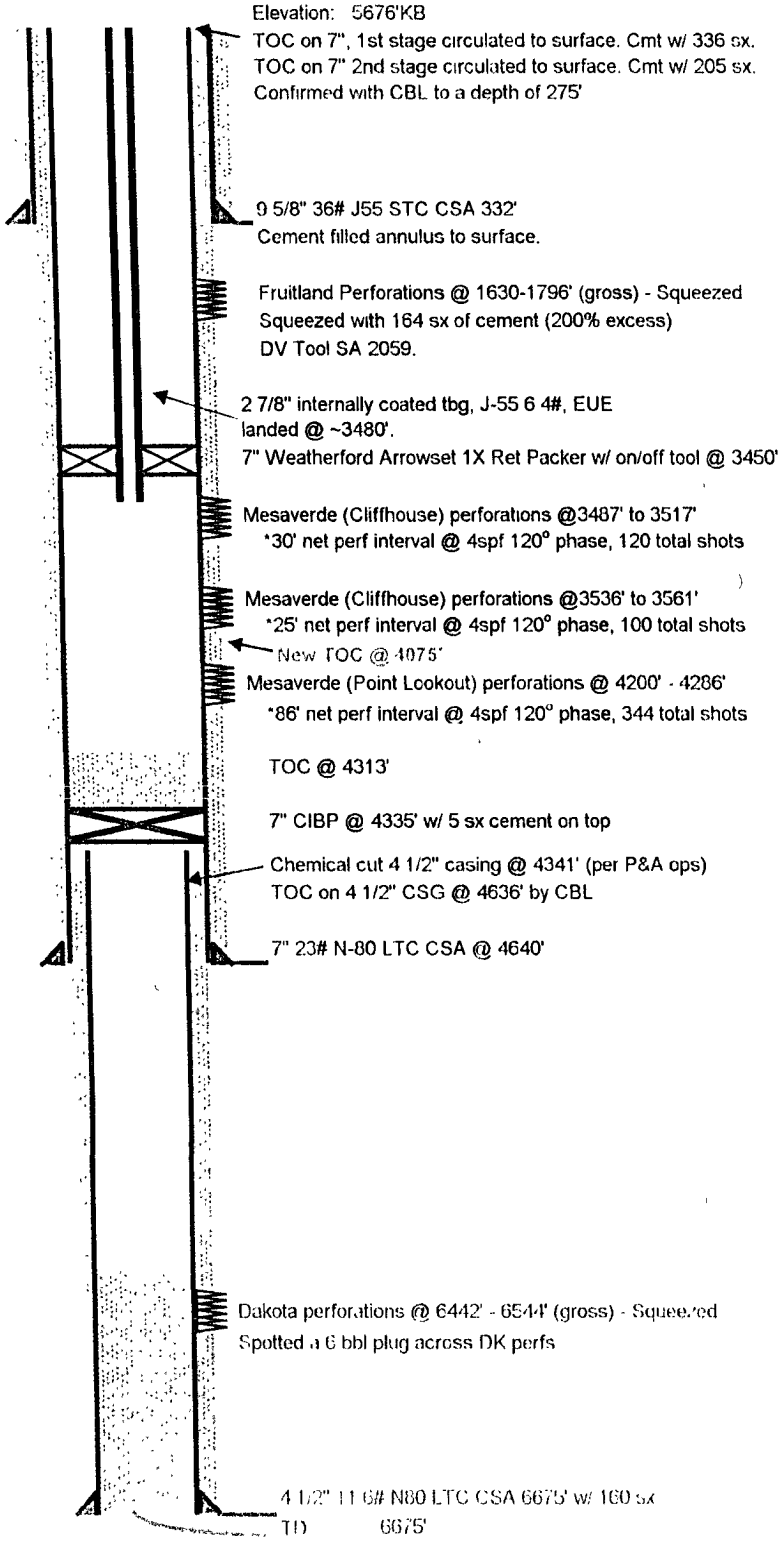
25) Start injecting disposal water into the formation and monitor pressure and rate for 1 hour.

26) ND BOP and NU Wellhead.

27) RD Workover rig and Move out.

noble energy

Rio Bravo 27-05
SWD Proposal Schematic



Location 1505' FNL, 1245' FWL,
Sec 27, T31N, R13W,
San Juan County, New Mexico

Field: La Plata
Basin Dakota/Blanco Mesa Verde

API #. 30-045-33583
Spud Date. October 2, 2006

Geoprognosis.

Fruitland Coal - 1226'
Pictured Cliffs - 1805'
Lewis - 1999'
Cliffhouse - 3398'
Menefee - 3517'
Point Lookout - 4199'
Gallup - 5771'
Dakota - 6392'

6/4/2010

Guidelines for conducting step-rate tests

The operator must submit a written procedure and rig-up diagram to the OCD at least 24 hours before starting the test. The procedure will contain the following information:

A description of the mechanical configuration of the well.
The history of injection pressures and volumes.
The history of any fracture treatments and pressures especially ISIP.

A bottom hole pressure recorder will be required for wells deeper than 2000' and injection rates greater than 1 BPM.

A pressure gauge and recorder of the appropriate range will be used during the test.

Wells currently injecting must be shut-in at least 24 hours before the test unless the shut-in pressures indicate that the well has not adequately stabilized and a longer time is necessary.

Starting pump rates and pressures must be lower than the current rates and pressures if the well is currently injecting and there must be at least 3 steps below the .2psi/ft gradient and 3 steps above the break-over point.

Pumping equipment must be able to pump at the rates and pressures needed for the test.

Rate changes will be .5bpm or smaller unless the OCD witness determines that bigger rate changes are necessary due to small incremental increases in pressure.

Each step will be at least 15 minutes in duration unless otherwise determined by the OCD. Step duration must not be changed during the test.

The operator must have enough water on hand for the test.

The casing and bradenhead pressures will be monitored during the test.

All wellhead equipment must be rated for the anticipated pressures.