

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 87240
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

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.)		WELL API NO. 30-039-31020/05-007-06305
1. Type of Well: Oil Well ☐ Gas Well ☒ Other		5. Indicate Type of Lease STATE ☐ FEE ☒
2. Name of Operator Red Willow Production Co.		6. State Oil & Gas Lease No.
3. Address of Operator PO Box 369 Ignacio, CO 81137		7. Lease Name or Unit Agreement Name: NC Ute 23D
4. Well Location Unit Letter <u>I</u> : <u>1807</u> feet from the <u>South</u> line and <u>454</u> feet from the <u>East</u> line Section <u>9</u> Township <u>32N</u> Range <u>4W</u> NMPM County <u>Rio Arriba</u>		8. Well Number 2H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6193 GR		9. OGRID Number 216282
		10. Pool name or Wildcat Colorado/97774

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

NOTICE OF INTENTION TO:

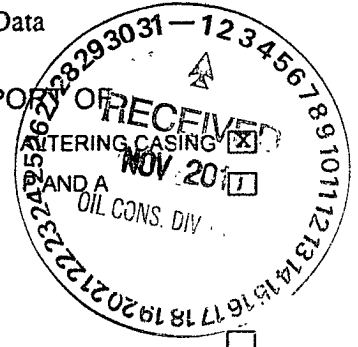
PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

SUBSEQUENT REPORT OF

REMEDIAL WORK ☐
COMMENCE DRILLING OPNS. ☐
CASING/CEMENT JOB ☐

OTHER: ☐

OTHER: ☐



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.

this well cross state line into Colorado

Based on drilling conditions and lithology of the target formation, Red Willow Production Company would like to make the following changes to the following casing strings:

*change the conductor hole size to 17 1/2".

*set the conductor casing to 120' +/- and cement with 142 sks of cement

*set the intermediate casing to 3839' MD (2923' TVD) and cement with 416 sks lead and 150 sks tail.

*set the production liner from 3739'-6411' MD (2933'-2588' TVD), no cement.

The change in TVD for the target formation is a result of drilling the coal with an updip angle of 7.9 degrees. This is reflected on the attached revised operations and directional drilling plans.

Spud Date:

10/27/11

Rig Release Date:

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

SIGNATURE

Tim G. Kelley

TITLE

Agent

DATE 10/31/11

Type or print name

Tim G. Kelley

E-mail address:

timefinney@aol.com

PHONE 970-585-4722

For State Use Only

APPROVED BY

Chant

TITLE

DATE

Conditions of Approval (if any):

A

11/1/2011



Red Willow Production Company

OPERATIONS PLAN

WELL NAME.....NC Ute 23D #2H
JOB TYPE.....Horizontal OPE FTC
DEPT.....Drilling and Completions

GENERAL INFORMATION

Surface Location	1807 FSL 454 FEL
S-T-R	(I) Sec.09, T32N, R04W
Bottom Hole Location	760 FNL 760 FEL
S-T-R	(A) Sec.23, T32N, R04W
County, State	Archuleta, Colorado
Elevations	6193' GL
Total Depth	6411' +/- (MD); 2952' (TVD)
Formation Objective	Basin Fruitland Coal

FORMATION TOPS

San Jose	Surface
Nacimiento	991' (TVD)
Ojo Alamo Ss	2285' (TVD)
Kirtland Sh	2436' (TVD)
Fruitland Fm	2802' (TVD) 2913'MD
Top Target Coal	2936' (TVD) 3467'MD
Base Target Coal	2952' (TVD)
Total Depth	2933'-2588' (TVD), 3739'-6411' (MD)

DRILLING

Conductor: 17-1/2" wellbore will be drilled with a freshwater mud system (spud mud)

Surface: 12-1/4" wellbore will be drilled with a fresh water mud system (spud mud).

Intermediate: 8-3/4" wellbore will be drilled with a LSND mud system. Weighting materials will be drill cuttings and if needed barite. Mud density is expected to range from 8.4 ppg to 9.0 ppg.

Production: 6-1/4" wellbore will be drilled with a fresh water or brine water system depending on reservoir characteristics. Anticipated BHP can be as high as 1600 psi.

Projected KOP is 1600' TVD with 4.76°/100' doglegs.

Blowout Control Specifications:

A 3000 psi minimum double ram or annulus BOP stack will be used following nipple up of casing head. A 2" nominal, 2000 psi minimum choke manifold will also be used. An upper Kelly Cock valve handle and drill string valve should be available to fit each drill string and be available on the rig floor during drilling operations. **Pressure test BOP to 250 psi for 15 min and 2000 psi for 15 min.**

Logging Program:

Open hole logs: None

Mudlogs: 2608' TVD, 3267' MD to TD

Surveys: Surface to KOP every 500' and a minimum of every 200' for directional.

11/1/2011



Red Willow Production Company

CASING, TUBING & CASING EQUIPMENT

String	Start Depth	End Depth	Wellbore	Size	Wt	Grade
Conductor	0	120	17-1/2"	13-3/8"	48 lb/ft	H-40 ST&C
Surface	0	1100	12-1/4"	9-5/8"	32.3 lb/ft	H-40 ST&C
Intermediate	0	3839	8-3/4"	7"	23 lb/ft	J-55 LT&C
TVD	0	2923				
Prod. Liner	3739	6411	6-1/4"	4-1/2"	11.6 lb/ft	J-55 LT&C
TVD	2933	2588				
Tubing	0	3450	none	2-3/8"	4.7 lb/ft	J-55

Conductor Casing: Texas Pattern Guide Shoe on bottom of first joint and an insert float valve on top of first joint. Casing centralization with a minimum of 3 standard bow spring centralizers to achieve optimal standoff.

Surface Casing: Texas Pattern Guide Shoe on bottom of first joint and an insert float valve on top of first joint. Casing centralization with a minimum of 3 standard bow spring centralizers to achieve optimal standoff.

Intermediate Casing: Self fill float shoe with self fill float collar on bottom and top of first joint. Casing centralization with double bow spring and centralizers to optimize standoff.

Production Liner: Bull nose guide shoe on bottom of first joint, H-Latch liner drop off tool on top of last joint.

WELLHEAD

11" 3000 x 9 5/8" weld/slip on casing head. 9 5/8" x 7"x 2 3/8" 3000 psi Flanged Wellhead .

CEMENTING

Conductor Casing: 142 sks Type V with 2.0 % CaCl₂ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 167 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test conductor casing to 750 psi for 30 min.

Surface Casing: 584 sks Type V with 2.0 % CaCl₂ and ¼ #/sk Flocele (15.6 ppg, 1.18 ft³/sk 689 ft³ of slurry, 100% excess to circulate to surface). WOC 12 hours. Pressure test surface casing to 750 psi for 30 min.

Intermediate Casing: Depending on wellbore conditions, cement may consist of 416 sks 65/35 with 6.0 % Bentonite, 2.0 % CaCl₂, 10 #/sk Gilsonite, and ½ #/sk Flocele (12.3 ppg, 1.93 ft³/sk) and a tail of 150 sks Class G with ¼ #/sk Flocele (15.6 ppg, 1.18 ft³/sk). (980 ft³ of slurry, 60% excess to circulate to surface). WOC 12 hours. Test casing to 1200 psi for 30 min.

Production Liner: NO CEMENT, Open Hole Completion

Set slips with full string weight

If cement does not circulate, run temperature survey in 8 hrs. to determine TOC.

11/1/2011



Red Willow Production Company

OTHER INFORMATION

- 1) This well will be an open hole completion lined with an uncemented pre-drilled liner.
- 2) If lost circulation is encountered, sufficient LCM will be added to the mud system to maintain well control. The intermediate string may need to be cemented in multiple stages with a slurry design deviated from that listed above.
- 3) If high reservoir pressures or water flows are encountered slurry design may need to be deviated to from those listed above to satisfy wellbore and formation conditions.
- 4) No abnormal temperatures or pressures are anticipated.
- 5) This gas is dedicated.

RED WILLOW PROD. CO.

Rio Arriba Co, NM

Sec9 T32N-R04W - D2

North Carracas 23 D#2

Wellbore #1

Plan: Design #2

Standard Planning Report

31 October, 2011

RED WILLOW PROD. CO.

North Carracas 23 D#2
Sec9 T32N-R04W - D2
Rio Arriba Co. NM.
GE: 6190' / KB: 20'

PATHFINDER®

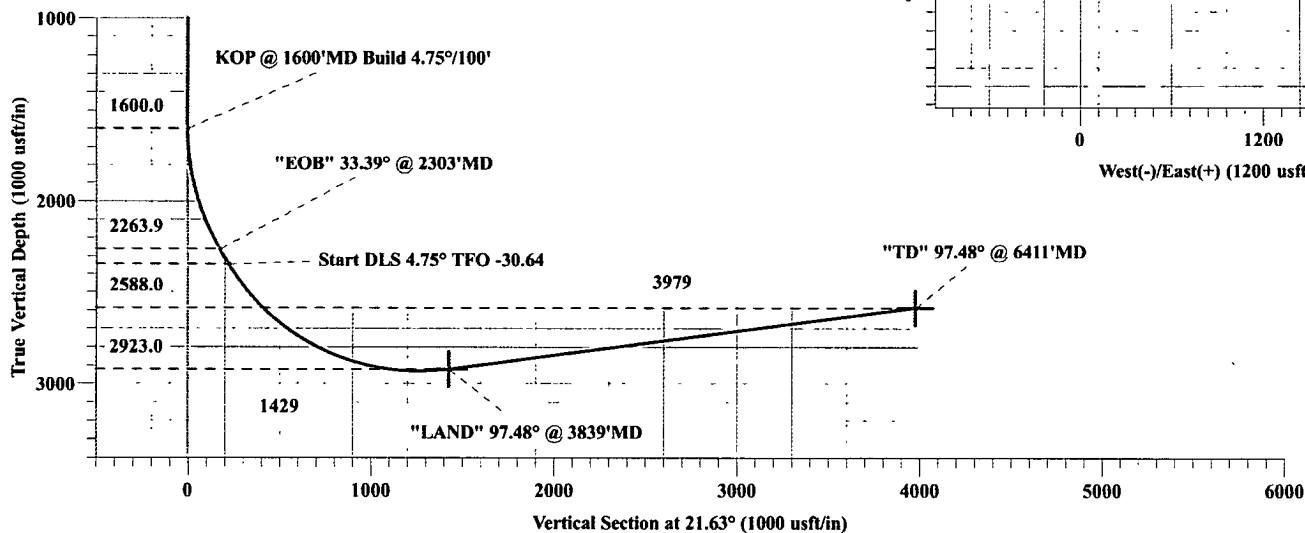
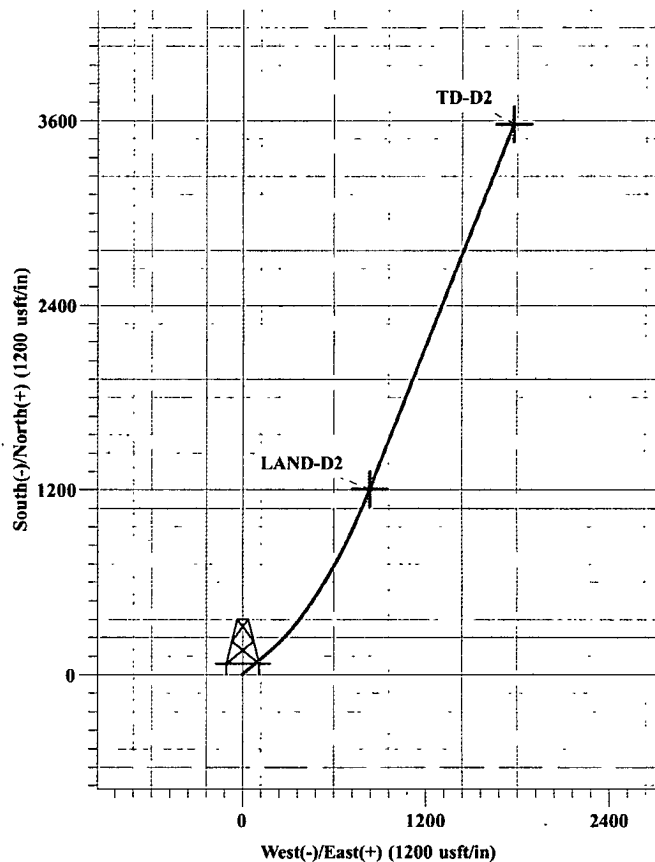
A Schlumberger Company

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TD-D2	2588.0	3575.0	1778.9	2187953.85	1349444.34	37° 0' 30.991 N	107° 14' 47.644 W	Point
LAND-D2	2923.0	1204.3	838.9	2185593.18	1348479.42	37° 0' 7.551 N	107° 14' 59.234 W	Point
	- plan hits target center							

WELL DETAILS: North Carracas 23 D#2

		6190.0		
Northing	Easting	Latitude	Longitude	
2184397.78	1347627.88	36° 59' 55.644 N	107° 15' 9.576 W	



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1600.0	0.00	0.00	1600.0	0.0	0.0	0.00	0.00	0.0	
2303.0	33.39	50.14	2263.9	127.6	152.9	4.75	50.14	175.0	
2402.7	33.39	50.14	2347.1	162.8	195.0	0.00	0.00	223.2	
3839.3	97.48	21.63	2923.0	1204.3	838.9	4.75	-30.64	1428.7	LAND-D2
6411.4	97.48	21.63	2588.0	3575.0	1778.9	0.00	0.00	3979.0	TD-D2

Plan: Design #2 (North Carracas 23 D#2/Wellbore #1)

Created By: Frank C. Scardino

Date: 10/31/2011

Planning Report

Database: EDM 5000 1 Single User Db
 Company: RED WILLOW PROD. CO.
 Project: Rio Arriba Co, NM
 Site: Sec9 T32N-R04W - D2
 Well: North Carracas 23 D#2
 Wellbore: Wellbore #1
 Design: Design #2

Local Co-ordinate Reference: Site Sec9 T32N-R04W - D2
 TVD Reference: RIG @ 6210.0usft
 MD Reference: RIG @ 6210.0usft
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Project	Rio Arriba Co, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site	Sec9 T32N-R04W - D2		
Site Position:	Northings:	2,184,397.78 usft	Latitude: 36° 59' 55.644 N
From: Map	Eastings:	1,347,627.88 usft	Longitude: 107° 15' 9.576 W
Position Uncertainty:	0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: -0.60 °

Well	North Carracas 23 D#2		
Well Position	+N/-S	0.0 usft	Northings: 2,184,397.78 usft
	+E/-W	0.0 usft	Eastings: 1,347,627.88 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 6,190.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	09/19/11	9.68
			Dip Angle
			63.77
			Field Strength
			50,926

Design	Design #2		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	2.0	0.0	0.0
			Direction
			21.63

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,303.0	33.39	50.14	2,263.9	127.6	152.9	4.75	4.75	0.00	50.14	
2,402.7	33.39	50.14	2,347.1	162.8	195.0	0.00	0.00	0.00	0.00	
3,839.3	97.48	21.63	2,923.0	1,204.3	838.9	4.75	4.46	-1.98	-30.64	LAND-D2
6,411.4	97.48	21.63	2,588.0	3,575.0	1,778.9	0.00	0.00	0.00	0.00	TD-D2

Planning Report

Database: EDM 5000.1 Single User Db
Company: RED WILLOW PROD. CO.
Project: Rio Arriba Co, NM
Site: Sec9 T32N-R04W - D2
Well: North Carracas 23 D#2
Wellbore: Wellbore #1
Design: Design #2

Local Co-ordinate Reference: Site Sec9 T32N-R04W - D2
TVD Reference: RIG @ 6210.0usft
MD Reference: RIG @ 6210.0usft
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 1600'MD Build 4.75°/100'									
1,700.0	4.75	50.14	1,699.9	2.7	3.2	3.6	4.75	4.75	0.00
1,800.0	9.50	50.14	1,799.1	10.6	12.7	14.5	4.75	4.75	0.00
1,900.0	14.25	50.14	1,896.9	23.8	28.5	32.6	4.75	4.75	0.00
2,000.0	19.00	50.14	1,992.7	42.1	50.4	57.7	4.75	4.75	0.00
2,100.0	23.75	50.14	2,085.8	65.5	78.4	89.8	4.75	4.75	0.00
2,200.0	28.50	50.14	2,175.6	93.7	112.2	128.4	4.75	4.75	0.00
2,303.0	33.39	50.14	2,263.9	127.6	152.9	175.0	4.75	4.75	0.00
"EOB" 33.39° @ 2303'MD									
2,402.7	33.39	50.14	2,347.1	162.8	195.0	223.2	0.00	0.00	0.00
Start DLS 4.75° TFO -30.64									
2,500.0	37.44	46.27	2,426.4	200.4	236.9	273.6	4.75	4.15	-3.98
2,600.0	41.70	42.97	2,503.5	245.8	281.6	332.3	4.75	4.26	-3.29
2,700.0	46.04	40.19	2,575.6	297.6	327.5	397.4	4.75	4.34	-2.78
2,800.0	50.44	37.80	2,642.2	355.6	374.4	468.6	4.75	4.40	-2.40
2,900.0	54.89	35.69	2,702.8	419.4	421.9	545.3	4.75	4.44	-2.11
3,000.0	59.36	33.79	2,757.1	488.4	469.7	627.1	4.75	4.48	-1.89
3,100.0	63.86	32.07	2,804.6	562.2	517.5	713.4	4.75	4.50	-1.72
3,200.0	68.39	30.48	2,845.1	640.3	564.9	803.5	4.75	4.52	-1.59
3,300.0	72.92	28.98	2,878.2	722.3	611.7	896.9	4.75	4.54	-1.50
3,400.0	77.47	27.55	2,903.7	807.4	657.5	992.9	4.75	4.55	-1.43
3,500.0	82.02	26.18	2,921.5	895.2	701.9	1,090.9	4.75	4.55	-1.38
3,600.0	86.58	24.83	2,931.5	984.9	744.7	1,190.1	4.75	4.56	-1.35
3,700.0	91.14	23.50	2,933.5	1,076.1	785.6	1,290.0	4.75	4.56	-1.33
3,800.0	95.69	22.16	2,927.5	1,168.1	824.4	1,389.7	4.75	4.56	-1.34
3,839.3	97.48	21.63	2,923.0	1,204.3	838.9	1,428.7	4.75	4.56	-1.35
"LAND" 97.48° @ 3839'MD									
3,900.0	97.48	21.63	2,915.1	1,260.3	861.1	1,488.9	0.00	0.00	0.00
4,000.0	97.48	21.63	2,902.1	1,352.4	897.6	1,588.1	0.00	0.00	0.00
4,100.0	97.48	21.63	2,889.0	1,444.6	934.2	1,687.2	0.00	0.00	0.00
4,200.0	97.48	21.63	2,876.0	1,536.8	970.7	1,786.4	0.00	0.00	0.00
4,300.0	97.48	21.63	2,863.0	1,629.0	1,007.3	1,885.5	0.00	0.00	0.00
4,400.0	97.48	21.63	2,850.0	1,721.1	1,043.8	1,984.7	0.00	0.00	0.00
4,500.0	97.48	21.63	2,836.9	1,813.3	1,080.4	2,083.8	0.00	0.00	0.00
4,600.0	97.48	21.63	2,823.9	1,905.5	1,116.9	2,183.0	0.00	0.00	0.00
4,700.0	97.48	21.63	2,810.9	1,997.6	1,153.5	2,282.1	0.00	0.00	0.00
4,800.0	97.48	21.63	2,797.9	2,089.8	1,190.0	2,381.3	0.00	0.00	0.00
4,900.0	97.48	21.63	2,784.8	2,182.0	1,226.5	2,480.4	0.00	0.00	0.00
5,000.0	97.48	21.63	2,771.8	2,274.1	1,263.1	2,579.6	0.00	0.00	0.00
5,100.0	97.48	21.63	2,758.8	2,366.3	1,299.6	2,678.7	0.00	0.00	0.00
5,200.0	97.48	21.63	2,745.8	2,458.5	1,336.2	2,777.9	0.00	0.00	0.00
5,300.0	97.48	21.63	2,732.8	2,550.6	1,372.7	2,877.0	0.00	0.00	0.00
5,400.0	97.48	21.63	2,719.7	2,642.8	1,409.3	2,976.2	0.00	0.00	0.00
5,500.0	97.48	21.63	2,706.7	2,735.0	1,445.8	3,075.3	0.00	0.00	0.00
5,600.0	97.48	21.63	2,693.7	2,827.1	1,482.4	3,174.5	0.00	0.00	0.00
5,700.0	97.48	21.63	2,680.7	2,919.3	1,518.9	3,273.6	0.00	0.00	0.00
5,800.0	97.48	21.63	2,667.6	3,011.5	1,555.5	3,372.8	0.00	0.00	0.00
5,900.0	97.48	21.63	2,654.6	3,103.6	1,592.0	3,471.9	0.00	0.00	0.00
6,000.0	97.48	21.63	2,641.6	3,195.8	1,628.5	3,571.1	0.00	0.00	0.00
6,100.0	97.48	21.63	2,628.6	3,288.0	1,665.1	3,670.2	0.00	0.00	0.00
6,200.0	97.48	21.63	2,615.5	3,380.1	1,701.6	3,769.4	0.00	0.00	0.00
6,300.0	97.48	21.63	2,602.5	3,472.3	1,738.2	3,868.5	0.00	0.00	0.00

Planning Report

Database: EDM 5000.1 Single User Db
 Company: RED WILLOW PROD. CO.
 Project: Rio Arriba Co, NM
 Site: Sec9 T32N-R04W - D2
 Well: North Carracas 23 D#2
 Wellbore: Wellbore #1
 Design: Design #2

Local Co-ordinate Reference: Site Sec9 T32N-R04W - D2
 TVD Reference: RIG @ 6210.0usft
 MD Reference: RIG @ 6210.0usft
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,400.0	97.48	21.63	2,589.5	3,564.5	1,774.7	3,967.7	0.00	0.00	0.00
6,411.4	97.48	21.63	2,588.0	3,575.0	1,778.9	3,979.0	0.00	0.00	0.00

"TD" 97.48° @ 6411'MD

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
TD-D2 - plan hits target center - Point	0.00	0.00	2,588.0	3,575.0	1,778.9	2,187,953.84	1,349,444.34	37° 0' 30.991 N	107° 14' 47.644 W
LAND-D2 - plan hits target center - Point	0.00	0.00	2,923.0	1,204.3	838.9	2,185,593.18	1,348,479.42	37° 0' 7.551 N	107° 14' 59.234 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,600.0	1,600.0	0.0	0.0	KOP @ 1600'MD Build 4.75°/100'
2,303.0	2,263.9	127.6	152.9	"EOB" 33.39° @ 2303'MD
2,402.7	2,347.1	162.8	195.0	Start DLS 4.75° TFO -30.64
3,839.3	2,923.0	1,204.3	838.9	"LAND" 97.48° @ 3839'MD
6,411.4	2,588.0	3,575.0	1,778.9	"TD" 97.48° @ 6411'MD