

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Secretary

Adrienne Sandoval, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-5 form.

Operator Signature Date: **Original APD 3/2/2015**

Change of Plans Sundry Date 5/1/2019

WELL INFORMATION:

DJR OPERATING, LLC

30-045-35656 BLANCO WASH UNIT #402H

Conditions of Approval:
(See the below checked and handwritten conditions)

- ☒ Notify Aztec OCD 24hrs prior to casing & cement.
- ☒ Hold C-104 for directional survey & "As Drilled" Plat
- ☐ Hold C-104 for NSL, NSP, DHC,
- ☐ Spacing rule violation. Operator must follow up with change of status notification on other well to be shut in or abandoned
- ☒ Regarding the use of a pit, closed loop system or below grade tank, the operator must comply with the following as applicable:
 - ☒ A pit requires a complete C-144 be submitted and approved prior to the construction or use of the pit, pursuant to 19.15.17.8.A
 - ☒ A closed loop system requires notification prior to use, pursuant to 19.15.17.9.A
 - ☒ A below grade tank requires a registration be filed prior to the construction or use of the below grade tank, pursuant to 19.15.17.8.C
- ☒ Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
- ☒ Submit Gas Capture Plan form prior to spudding or initiating recompletions operations.
- ☒ Regarding Hydraulic Fracturing, review EPA Underground Injection Control Guidance 84
- ☒ Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

- ✓ Well-bore communication is regulated under 19.15.29 NMAC. This requires well-bore Communication to be reported in accordance with 19.15.29.8.
- ✓ Comply with current regulations at time of spud
Prior to production operator needs to be in compliance with RULE 19.15.5.9
- ✓ Submit an amendment to the BLM to correct the bottom hole location reported on the BLM sundry form (see sundry submitted on 5/21/2019).



NMOCD Approved by Signature

5/31/19
Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

MAY 01 2019

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMNM 135989

6. If Indian, Allottee or Tribe Name
N/A

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
DJR Operating LLC.

3a. Address
1 Road 3263
Aztec, New Mexico 87410

3b. Phone No. (include area code)
505-632-3476

7. If Unit of CA/Agreement, Name and/or No.
NMNM 137065X

8. Well Name and No.
Blanco Wash Unit #402H

9. API Well No.
30-045-35656

10. Field and Pool or Exploratory Area
Blanco Wash Mancos Oil Pool

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SHL: 1569' FSL and 61' FEL Section 24, T24N, R9W
BHL: 124' FNL and 2471' FWL Section 20, T24N, R9W

11. County or Parish, State
San Juan County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other SHL Change, BHL Change & New Drilling Plan
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

DJR Operating LLC. has an approved APD for the proposed well, Blanco Wash Unit 402H well (API 30-045-35656) which will be a part of the Blanco Wash Unit. DJR Operating is submitting this sundry to change the SHL (switched SHL between 402H & 403H), BHL and a New Drilling Plan.

Please find attached an updated C-102 package reflecting the SHL change, BHL change and a new drilling plan.

NMOCD

MAY 20 2019

DISTRICT III

ACCEPTED FOR RECORD

MAY 17 2019

FARMINGTON FIELD OFFICE
By: _____

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)

Steven Merrell

Title Regulatory Specialist

Signature

Date 05/01/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Retroleum Engr

Date 17 May 2019

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office FFO

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)

NMOCD

DISTRICT I

1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II

811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III

1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-8170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 478-3480 Fax: (505) 478-3482

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35656	² Pool Code 98173	³ Pool Name Blanco Wash Unit Oil Pool
⁴ Property Code 325180	⁵ Property Name BLANCO WASH UNIT	⁶ Well Number 402H
⁷ GRID No. 371838	⁸ Operator Name DJR OPERATING, LLC	⁹ Elevation 6892.4'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	24	24N	9W		1569'	SOUTH	61'	EAST	SAN JUAN

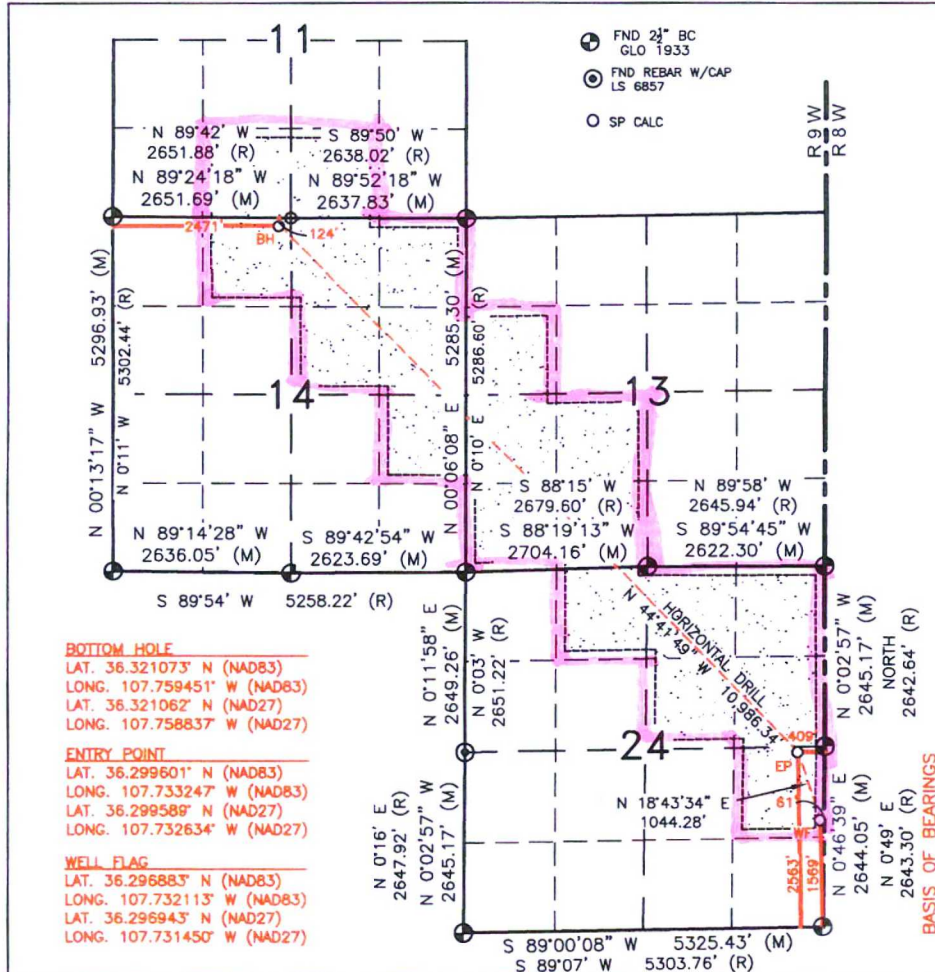
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	14	24N	9W		124'	NORTH	2471'	WEST	SAN JUAN

¹² Dedicated Acres PROJECT AREA: SEC 11: SW/SE & SE/SW (80 AC.); SEC 13: SW/4 & SW/NW (200 AC); SEC 14: NE/4, NE/SE & NE/NW (240 AC); SEC 24: NE/SE, NE/4 & NE/NW (240 AC) = 760 ACRES TOTAL	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

18



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Steven Merrell 5/1/19
Signature Date

Steven Merrell

Printed Name

Smerrell@djrlc.com

E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
APRIL 29, 2019

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number 11393

DISTRICT I

1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II

811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III

1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

DJR OPERATING, LLC
BLANCO WASH UNIT #402H

NW CORNER SEC 25

LAT. 36.306867° N (NAD83)
LONG. 107.749931° W (NAD83)
LAT. 36.306855° N (NAD27)
LONG. 107.749317° W (NAD27)

SE CORNER SEC 25

LAT. 36.292576° N (NAD83)
LONG. 107.731976° W (NAD83)
LAT. 36.292564° N (NAD27)
LONG. 107.731363° W (NAD27)

SW CORNER SEC 25

LAT. 36.292232° N (NAD83)
LONG. 107.750036° W (NAD83)
LAT. 36.292220° N (NAD27)
LONG. 107.749422° W (NAD27)

SW CORNER SEC 14

LAT. 36.306938° N (NAD83)
LONG. 107.767781° W (NAD83)
LAT. 36.306926° N (NAD27)
LONG. 107.767167° W (NAD27)

NW CORNER SEC 14

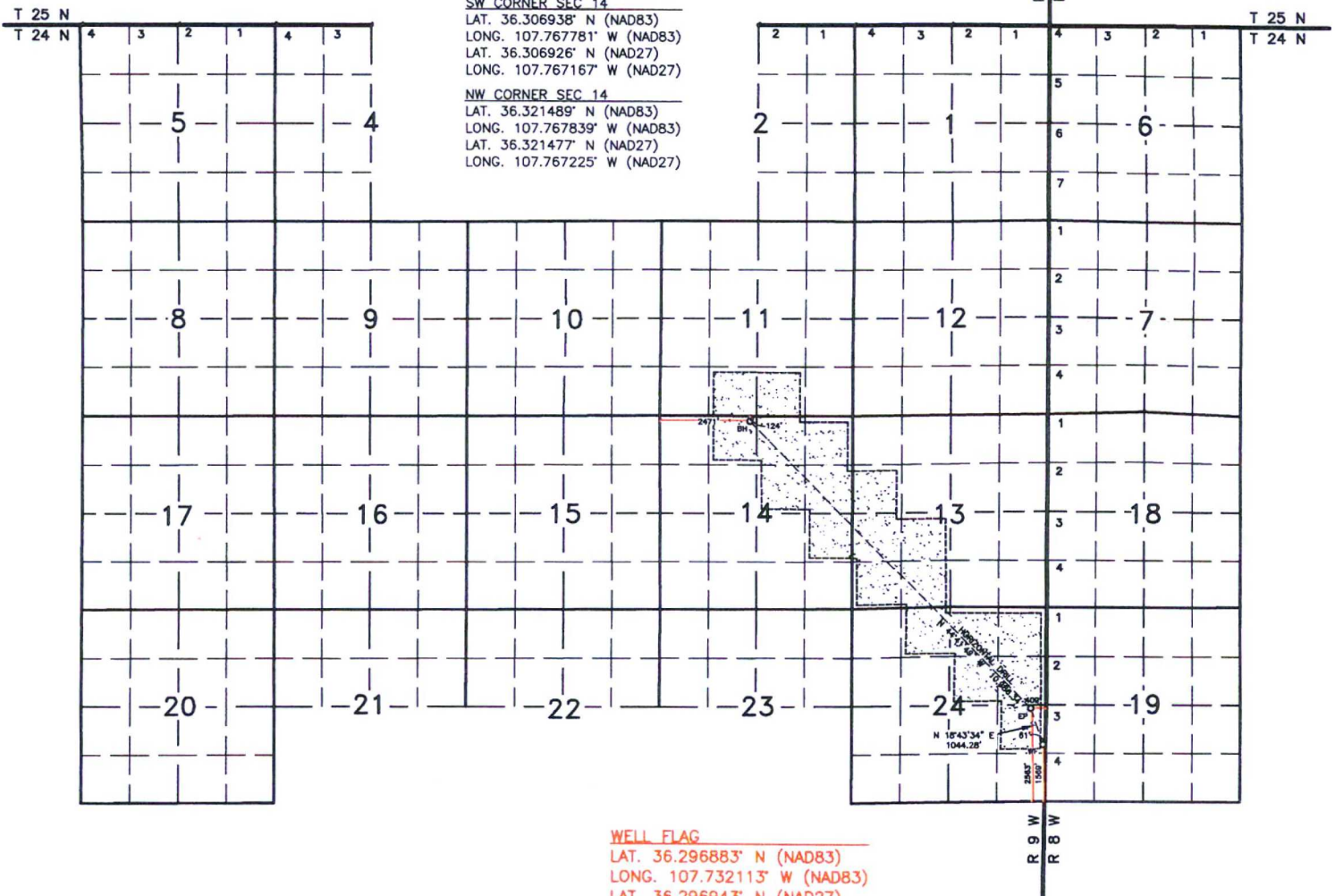
LAT. 36.321489° N (NAD83)
LONG. 107.767839° W (NAD83)
LAT. 36.321477° N (NAD27)
LONG. 107.767225° W (NAD27)

N/4 CORNER SEC 14

LAT. 36.321408° N (NAD83)
LONG. 107.758838° W (NAD83)
LAT. 36.321396° N (NAD27)
LONG. 107.758224° W (NAD27)

NE CORNER SEC 14

LAT. 36.321386° N (NAD83)
LONG. 107.749883° W (NAD83)
LAT. 36.321374° N (NAD27)
LONG. 107.749270° W (NAD27)

**WELL FLAG**

LAT. 36.296883° N (NAD83)
LONG. 107.732113° W (NAD83)
LAT. 36.296943° N (NAD27)
LONG. 107.731450° W (NAD27)

ENTRY POINT

LAT. 36.299601° N (NAD83)
LONG. 107.733247° W (NAD83)
LAT. 36.299589° N (NAD27)
LONG. 107.732634° W (NAD27)

BOTTOM HOLE

LAT. 36.321073° N (NAD83)
LONG. 107.759451° W (NAD83)
LAT. 36.321062° N (NAD27)
LONG. 107.758837° W (NAD27)

PROJECT AREA:

SEC 11: SW/SE & SE/SW (80 AC.); SEC 13: SW/4 &
SW/NW (200 AC); SEC 14: NE/4, NE/SE & NE/NW
(240 AC); SEC 24: NE/SE, NE/4 & NE/NW (240 AC)
= 760 ACRES TOTAL

TOTAL 13128.47 ACRES: ALL OF SEC. 6, 7, 18, & 19, IN
T24N R8W. ALL OF SECTIONS 1, 5, 8 - 17, 20, & 21, E/2
SECTION 2, W/2 SECTION 4, N/2 SECTIONS 21 - 23, IN T24N
R9W. - UNDIVIDED UNIT

DRILLING PLAN **Blanco Wash Unit 402H** **San Juan County, New Mexico**

Surface Location
61-ft FEL & 1569-ft FSL
Sec 24 T24N R9W
Graded Elevation 6892' MSL
RKB Elevation 6906' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.2968830° N
Longitude 107.7321130° W

Kick Off Point for Horizontal Build Curve
4968-ft MD
4186-ft TVD

Local Coordinates (from SHL)

499-ft North
73-ft East

Heel Location (Pay zone entry)

409-ft FEL & 2563-ft FSL
Sec 24 T24N R9W

Heel Geographical Coordinates (NAD-83)

Latitude 36.29960108° N
Longitude 107.73324708° W

Bottom Hole Location (TD)

124-ft FNL & 2471-ft FWL
Sec 14 T24N R9W

BHL Geographical Coordinates (NAD-83)

Latitude 36.32107327° N
Longitude 107.75945090° W

First Take Point (FTP)

409-ft FEL & 2563-ft FSL
Sec 24 T24N R9W

FTP Geographical Coordinates (NAD-83)

Latitude 36.29960108° N
Longitude -107.73324708° W

Last Take Point (LTP)

124-ft FNL & 2471-ft FWL
Sec 14 T24N R9W

LTP Geographical Coordinates (NAD-83)

Latitude 36.32107327° N
Longitude -107.75945090° W

Well objectives

This well is planned as a 10990-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 145.0°F. Bottom hole pressure in the Gallup C is forecast to be 1985 psi.

Formation Tops (Sd = Sand; Sh = Shale; Siltstone = Slt, Coal = C; W = water; O = oil; G = gas; NP = no penetration)

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	877	875	Sd	W	8.3	8.4 - 8.8
Kirtland	1235	1231	Sh	-	8.3	8.4 - 8.8
Fruitland	1627	1621	C	G	8.3	9.0 - 9.5
Picture Cliffs	1851	1843	Sd	W	8.3	9.0 - 9.5
Lewis	1947	1938	Sh	-		9.0 - 9.5
Chacra	2699	2685	Sd	-	8.3	9.0 - 9.5
Menefee	3346	3328	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4263	4239	Sd	-	8.3	9.0 - 9.5
Mancos	4481	4455	Sh	-		9.0 - 9.5
Mancos Silt	4861	4833	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5303	5251	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5352	5290	Sd	O/G	6.6	8.8 - 9.0
Gallup C	5489	5387	Sd	O/G	6.6	8.8 - 9.0
Target	5912	5529	Sd	O/G	6.6	8.8 - 9.0

Casing Program

Casing OD	Hole Size	Weight (#/ft)	Grade	Coupling	MD Top	MD Bottom	TVD Top	TVD Bottom	Top of Cement
9-5/8"	12-1/4"	36	K-55	STC	surf	350	surf	350	surface
7"	8-3/4"	26	K-55	LTC	surf	5914	surf	5529	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5714	16910	5495	5529	5714

Note: all casing will be new

Casing Design Load Cases

		Casing String		
		9-5/8"	7"	4-1/2"
		Surface	Intermediate	Production Liner
Collapse	Full internal evacuation ¹	✓	✓	✓
	Cementing	✓	✓	✓
Burst	Pressure test	✓ ²	✓ ²	✓
	Gas kick		✓ ³	
	Fracture at shoe, 1/3 BHP at surface		✓ ⁴	
	Injection down casing			✓ ⁵
Axial	Dynamic load on casing coupling ⁶	✓	✓	✓
Axial	Overpull ⁷	✓	✓	✓

Note

- 1 Fluid level at shoe, air column to surface, pore pressure outside
- 2 Tested to 80% of minimum internal yield with freshwater inside, pore pressure outside
- 3 50 bbl kick at TD, 0.50 ppg intensity, 4" drill pipe, 9.0 ppg mud, fracture gradient at shoe
- 4 2060 psi BHP, 687 psi surface pressure, 12.5 ppg EMW shoe integrity
- 5 Surface stimulation pressure of 8000 psi on 8.3 ppg fluid column. Stimulation will be down frac string, so load does not apply to 7" intermediate casing.
- 6 Shock load from abrupt pipe deceleration, evaluated against coupling rating
- 7 Overpull values as follows: Surface casing 20,000 lbs, Intermediate & Production 100,000 lbs

Casing Design Factors

		Design Factors			
Casing string	Casing OD	Burst	Collapse	Axial	Triaxial
Surface	9-5/8"	1.25	13.38	8.16	1.56
Intermediate	7"	1.25	1.50	1.68	1.34
Production liner	4-1/2"	1.37	3.68	1.88	1.69

Cement Design

Additives: A=Accelerator; B=Bond Enhancer; De=Defoamer; Di=Dispersant; Ex=Extender; Fl=Fluid Loss L=Lost Circulation; R=Retarder; SA=Suspending Agent; THX=Thixotropic Additive; V=Viscosifier

9-5/8" Surface Casing

	Lead
Name	Redi-Mix
Type	I-II
Additives	20% Fly Ash
Planned top	Surface
Density (ppg)	14.50
Yield (cf/sx)	1.61
Mix water (gal/sx)	7.41
Volume (sx)	114
Volume (bbls)	33

<u>7" Intermediate Casing</u>	<u>Lead</u>	<u>Tail</u>
Halliburton Name	HALCEM	VARICEM
Type	Poz/G	Poz/G
Additives	Ex, L, SA	Ex, FI, SA, L, THX
Planned top	Surface	3981-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	1.95	1.30
Mix water (gal/sx)	10.14	5.64
Volume (sx)	505	386
Volume (bbls)	176	90

<u>4-1/2" Production Liner</u>	<u>Lead</u>
Halliburton Name	EXTENDACEM
Type	Poz/G
Additives	B, De, Di, FI, Re, V
Planned top	5714-ft
Density (ppg)	13.3
Yield (cf/sx)	1.36
Mix water (gal/sx)	5.94
Volume (sx)	1134
Volume (bbls)	275

Wellhead & Pressure Control

The well head will be an 11" 5M multi-bowl system. A 3M BOP conforming to Onshore Order #2 will be installed on the surface casing. All testing will be as stipulated in Onshore Order #2. The BOP and accumulator will meet API 16D and 16E respectively.

A PVT mud monitoring system and a trip tank will be rigged up and operational for all hole intervals. An electronic geolograph will be employed to monitor and record drilling data (ROP, WOB, SPM, Pressure, RPM and torque).

Mud Program

Surface hole will be drilled with a fresh water, native mud system. In intermediate hole, a low weight 7% KCl LSND drilling fluid will be used, with KCl providing chemical stability for the young shales and clays present in the interval. In production hole a LSND system with polymer and lubricant additives is programmed. Sufficient drill water and mud additives will be on hand to maintain adequate pit volumes and maintain well control.

Hole Section	Fluid type	Interval (MD)	Density (ppg)	Funnel Viscosity	Yield Point	Fluid Loss (cc/30 min)
Surface	Fresh water spud mud	0 – 350	8.4 – 8.8	32 – 44	2 – 12	NC
Intermediate	7% KCl Low solids, non-dispersed	350 – 5914	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5914 – 16910	8.8 – 9.2	34 – 38	6 – 8	6 – 8

Cores, tests and logs

Wellbore surveying: Drift (inclination only) surveys will be obtained in surface hole. MWD directional surveys will be taken in intermediate and production hole.

Logging while drilling: None in surface hole. MWD GR in intermediate and production hole.

Mud logging: a two-person mud logging unit with C1 – C4 gas analysis will be operational in intermediate and production hole.

Electric logging: No open hole electric logs are programmed. A cased hole GR/CCL will be run during completions for perforating depth control.

Cuttings and drilling fluids management

A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All

solids will be collected in 3-sided bins and will then be put into transports with a bucket loader. Drying agents will be used if necessary. The solids will be taken to a licensed commercial disposal facility. Whole mud will be dewatered back to drill water and used as make up for subsequent wells or hauled off for disposal. A diagram of the closed loop system is included.

Completion

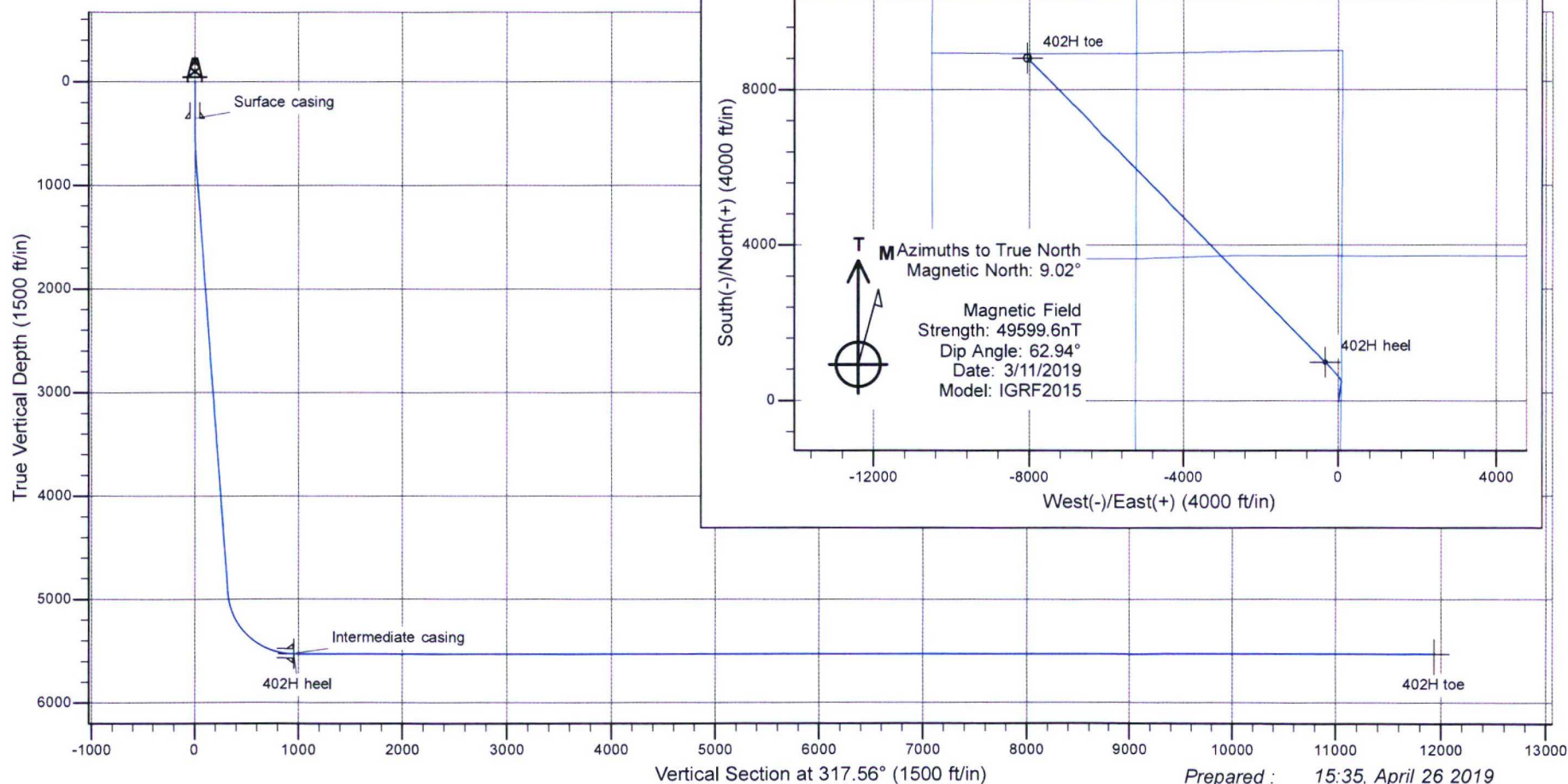
It is envisioned that this well will be completed with a multi-stage sand frac, using the plug and perf technique. After drilling out the plugs, the current plan is to install a 2-7/8" plunger-assisted gas lift tubing string. The stimulation and completion plan will be sundried at a later date.



Pad name : I24A 2409
Well name : Blanco Wash Unit # 402H

SHL Latitude : 36.29688300
SHL Longitude : -107.73211300

US State Plane 1983
North American Datum 1983
New Mexico Western Zone



TRAJECTORY DETAILS Pad elevation : 6892 RKB @ 6906ft (RIG)

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0	0.00	0.00	0	0	0	0.00	0.00	0	
450	0.00	0.00	450	0	0	0.00	0.00	0	
783	6.65	8.32	782	19	3	2.00	8.32	12	
4968	6.65	8.32	4939	499	73	0.00	0.00	319	
5924	90.00	315.36	5529	989	-334	9.00	-53.14	956	402H heel
16910	90.00	315.36	5529	8807	-8053	0.00	0.00	11934	402H toe

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
402H heel	5529	989	-334	1928370	2752584	36.29960108	-107.73324708
402H toe	5529	8807	-8053	1936179	2744856	36.32107327	-107.75945090

DJR Operating

Blanco Wash Unit

I24A 2409

402H

Original drilling

Plan: APD

Standard Planning Report

26 April, 2019

Planning Report

Database: EDM
Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 402H
Wellbore: Original drilling
Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	Blanco Wash Unit		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	I24A 2409		
Site Position:		Northing:	1,927,380.66 usft
From:	Lat/Long	Easting:	2,752,918.75 usft
Position Uncertainty:	0.0 usft	Slot Radius:	16 "
		Latitude:	36° 17' 48.779 N
		Longitude:	107° 43' 55.607 W
		Grid Convergence:	0.06 °

Well	# 402H		
Well Position	+N/-S	0.0 usft	Northing: 1,927,380.66 usft
	+E/-W	0.0 usft	Easting: 2,752,918.75 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 36° 17' 48.779 N
			Longitude: 107° 43' 55.607 W
			Ground Level: 6,892.0 usft

Wellbore	Original drilling					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)	
	IGRF2015	3/11/2019	9.02	62.94	49,599.61131678	

Design	APD				
Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	317.56	

Plan Survey Tool Program	Date	4/26/2019			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	16,910.2	APD (Original drilling)	MWD+IGRF	
				OWSG MWD + IGRF or WMM	

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	
450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.00	0.00	
782.7	6.65	8.32	781.9	19.1	2.8	2.00	2.00	0.00	8.32	
4,968.3	6.65	8.32	4,939.4	499.0	73.0	0.00	0.00	0.00	0.00	
5,923.8	90.00	315.36	5,529.0	989.5	-334.2	9.00	8.72	-5.54	-53.14	402H heel
16,910.2	90.00	315.36	5,529.0	8,807.0	-8,053.3	0.00	0.00	0.00	0.00	402H toe

Planning Report

Database: EDM
Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 402H
Wellbore: Original drilling
Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
Surface casing									
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
450.0	0.00	0.00	450.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	1.00	8.32	500.0	0.4	0.1	0.3	2.00	2.00	0.00
600.0	3.00	8.32	599.9	3.9	0.6	2.5	2.00	2.00	0.00
700.0	5.00	8.32	699.7	10.8	1.6	6.9	2.00	2.00	0.00
782.7	6.65	8.32	781.9	19.1	2.8	12.2	2.00	2.00	0.00
800.0	6.65	8.32	799.1	21.1	3.1	13.5	0.00	0.00	0.00
900.0	6.65	8.32	898.5	32.5	4.8	20.8	0.00	0.00	0.00
1,000.0	6.65	8.32	997.8	44.0	6.4	28.1	0.00	0.00	0.00
1,081.8	6.65	8.32	1,079.0	53.4	7.8	34.1	0.00	0.00	0.00
Ojo Alamo									
1,100.0	6.65	8.32	1,097.1	55.5	8.1	35.5	0.00	0.00	0.00
1,200.0	6.65	8.32	1,196.4	66.9	9.8	42.8	0.00	0.00	0.00
1,234.8	6.65	8.32	1,231.0	70.9	10.4	45.3	0.00	0.00	0.00
Kirtland									
1,300.0	6.65	8.32	1,295.8	78.4	11.5	50.1	0.00	0.00	0.00
1,400.0	6.65	8.32	1,395.1	89.9	13.1	57.5	0.00	0.00	0.00
1,500.0	6.65	8.32	1,494.4	101.3	14.8	64.8	0.00	0.00	0.00
1,600.0	6.65	8.32	1,593.7	112.8	16.5	72.1	0.00	0.00	0.00
1,627.4	6.65	8.32	1,621.0	115.9	17.0	74.1	0.00	0.00	0.00
Fruitland									
1,700.0	6.65	8.32	1,693.1	124.3	18.2	79.4	0.00	0.00	0.00
1,800.0	6.65	8.32	1,792.4	135.7	19.8	86.8	0.00	0.00	0.00
1,850.9	6.65	8.32	1,843.0	141.6	20.7	90.5	0.00	0.00	0.00
Picture Cliffs									
1,900.0	6.65	8.32	1,891.7	147.2	21.5	94.1	0.00	0.00	0.00
1,946.6	6.65	8.32	1,938.0	152.5	22.3	97.5	0.00	0.00	0.00
Lewis									
2,000.0	6.65	8.32	1,991.1	158.7	23.2	101.4	0.00	0.00	0.00
2,100.0	6.65	8.32	2,090.4	170.1	24.9	108.8	0.00	0.00	0.00
2,200.0	6.65	8.32	2,189.7	181.6	26.6	116.1	0.00	0.00	0.00
2,300.0	6.65	8.32	2,289.0	193.1	28.2	123.4	0.00	0.00	0.00
2,400.0	6.65	8.32	2,388.4	204.5	29.9	130.8	0.00	0.00	0.00
2,500.0	6.65	8.32	2,487.7	216.0	31.6	138.1	0.00	0.00	0.00
2,600.0	6.65	8.32	2,587.0	227.5	33.3	145.4	0.00	0.00	0.00
2,698.7	6.65	8.32	2,685.0	238.8	34.9	152.6	0.00	0.00	0.00
Chacra									
2,700.0	6.65	8.32	2,686.3	238.9	34.9	152.7	0.00	0.00	0.00
2,800.0	6.65	8.32	2,785.7	250.4	36.6	160.1	0.00	0.00	0.00
2,900.0	6.65	8.32	2,885.0	261.8	38.3	167.4	0.00	0.00	0.00
3,000.0	6.65	8.32	2,984.3	273.3	40.0	174.7	0.00	0.00	0.00
3,100.0	6.65	8.32	3,083.6	284.8	41.6	182.1	0.00	0.00	0.00
3,200.0	6.65	8.32	3,183.0	296.2	43.3	189.4	0.00	0.00	0.00
3,300.0	6.65	8.32	3,282.3	307.7	45.0	196.7	0.00	0.00	0.00
3,346.0	6.65	8.32	3,328.0	313.0	45.8	200.1	0.00	0.00	0.00
Menefee									
3,400.0	6.65	8.32	3,381.6	319.2	46.7	204.0	0.00	0.00	0.00

Planning Report

Database: EDM
Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 402H
Wellbore: Original drilling
Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
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)
3,500.0	6.65	8.32	3,480.9	330.6	48.3	211.4	0.00	0.00	0.00
3,600.0	6.65	8.32	3,580.3	342.1	50.0	218.7	0.00	0.00	0.00
3,700.0	6.65	8.32	3,679.6	353.6	51.7	226.0	0.00	0.00	0.00
3,800.0	6.65	8.32	3,778.9	365.0	53.4	233.4	0.00	0.00	0.00
3,900.0	6.65	8.32	3,878.3	376.5	55.1	240.7	0.00	0.00	0.00
4,000.0	6.65	8.32	3,977.6	388.0	56.7	248.0	0.00	0.00	0.00
4,100.0	6.65	8.32	4,076.9	399.4	58.4	255.4	0.00	0.00	0.00
4,200.0	6.65	8.32	4,176.2	410.9	60.1	262.7	0.00	0.00	0.00
4,263.2	6.65	8.32	4,239.0	418.1	61.1	267.3	0.00	0.00	0.00
Point Lookout									
4,300.0	6.65	8.32	4,275.6	422.4	61.8	270.0	0.00	0.00	0.00
4,400.0	6.65	8.32	4,374.9	433.8	63.4	277.3	0.00	0.00	0.00
4,480.7	6.65	8.32	4,455.0	443.1	64.8	283.3	0.00	0.00	0.00
Mancos									
4,500.0	6.65	8.32	4,474.2	445.3	65.1	284.7	0.00	0.00	0.00
4,600.0	6.65	8.32	4,573.5	456.8	66.8	292.0	0.00	0.00	0.00
4,700.0	6.65	8.32	4,672.9	468.2	68.5	299.3	0.00	0.00	0.00
4,800.0	6.65	8.32	4,772.2	479.7	70.1	306.7	0.00	0.00	0.00
4,861.2	6.65	8.32	4,833.0	486.7	71.2	311.2	0.00	0.00	0.00
Mancos Silt									
4,900.0	6.65	8.32	4,871.5	491.2	71.8	314.0	0.00	0.00	0.00
4,968.0	6.65	8.32	4,939.0	498.9	73.0	319.0	0.00	0.00	0.00
KOP									
4,968.3	6.65	8.32	4,939.4	499.0	73.0	319.0	0.00	0.00	0.00
5,000.0	8.67	353.00	4,970.8	503.2	72.9	322.1	9.00	6.36	-48.33
5,050.0	12.52	340.14	5,019.9	512.0	70.6	330.2	9.00	7.71	-25.72
5,100.0	16.70	333.44	5,068.3	523.5	65.6	342.1	9.00	8.35	-13.41
5,150.0	21.01	329.39	5,115.6	537.7	57.8	357.8	9.00	8.62	-8.10
5,200.0	25.38	326.68	5,161.6	554.4	47.3	377.2	9.00	8.74	-5.43
5,250.0	29.79	324.72	5,205.9	573.5	34.3	400.1	9.00	8.82	-3.91
5,300.0	34.22	323.23	5,248.2	594.9	18.7	426.4	9.00	8.86	-2.98
5,303.3	34.52	323.14	5,251.0	596.4	17.6	428.3	9.00	8.88	-2.62
Gallup A									
5,350.0	38.67	322.05	5,288.5	618.5	0.7	456.0	9.00	8.89	-2.35
5,352.0	38.84	322.00	5,290.0	619.5	-0.1	457.2	9.00	8.90	-2.13
Gallup B									
5,400.0	43.12	321.07	5,326.2	644.1	-19.7	488.6	9.00	8.91	-1.94
5,450.0	47.58	320.24	5,361.4	671.6	-42.3	524.1	9.00	8.92	-1.65
5,489.3	51.10	319.67	5,387.0	694.4	-61.5	554.0	9.00	8.93	-1.45
Gallup C									
5,500.0	52.05	319.53	5,393.6	700.8	-66.9	562.3	9.00	8.94	-1.36
5,550.0	56.52	318.89	5,422.8	731.5	-93.4	602.9	9.00	8.94	-1.27
5,600.0	60.99	318.32	5,448.7	763.6	-121.6	645.6	9.00	8.95	-1.14
5,650.0	65.47	317.80	5,471.3	796.8	-151.5	690.2	9.00	8.95	-1.05
5,700.0	69.95	317.31	5,490.2	830.9	-182.7	736.5	9.00	8.95	-0.98
5,714.0	71.20	317.18	5,494.9	840.6	-191.6	749.7	9.00	8.96	-0.94
Top of liner									
5,750.0	74.42	316.85	5,505.5	865.8	-215.1	784.1	9.00	8.96	-0.91
5,800.0	78.90	316.41	5,517.0	901.1	-248.5	832.7	9.00	8.96	-0.88
5,850.0	83.38	315.98	5,524.7	936.8	-282.7	882.1	9.00	8.96	-0.86
5,900.0	87.86	315.56	5,528.6	972.5	-317.5	931.9	9.00	8.96	-0.84
5,913.8	89.10	315.45	5,528.9	982.3	-327.1	945.7	9.00	8.96	-0.84
Intermediate casing									

Planning Report

Database: EDM
Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 402H
Wellbore: Original drilling
Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
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)
5,923.8	90.00	315.36	5,529.0	989.5	-334.2	955.7	9.00	8.96	-0.83
Target									
6,000.0	90.00	315.36	5,529.0	1,043.7	-387.7	1,031.8	0.00	0.00	0.00
6,100.0	90.00	315.36	5,529.0	1,114.8	-457.9	1,131.7	0.00	0.00	0.00
6,200.0	90.00	315.36	5,529.0	1,186.0	-528.2	1,231.7	0.00	0.00	0.00
6,300.0	90.00	315.36	5,529.0	1,257.1	-598.5	1,331.6	0.00	0.00	0.00
6,400.0	90.00	315.36	5,529.0	1,328.3	-668.7	1,431.5	0.00	0.00	0.00
6,500.0	90.00	315.36	5,529.0	1,399.4	-739.0	1,531.4	0.00	0.00	0.00
6,600.0	90.00	315.36	5,529.0	1,470.6	-809.3	1,631.4	0.00	0.00	0.00
6,700.0	90.00	315.36	5,529.0	1,541.8	-879.5	1,731.3	0.00	0.00	0.00
6,800.0	90.00	315.36	5,529.0	1,612.9	-949.8	1,831.2	0.00	0.00	0.00
6,900.0	90.00	315.36	5,529.0	1,684.1	-1,020.0	1,931.2	0.00	0.00	0.00
7,000.0	90.00	315.36	5,529.0	1,755.2	-1,090.3	2,031.1	0.00	0.00	0.00
7,100.0	90.00	315.36	5,529.0	1,826.4	-1,160.6	2,131.0	0.00	0.00	0.00
7,200.0	90.00	315.36	5,529.0	1,897.5	-1,230.8	2,230.9	0.00	0.00	0.00
7,300.0	90.00	315.36	5,529.0	1,968.7	-1,301.1	2,330.9	0.00	0.00	0.00
7,400.0	90.00	315.36	5,529.0	2,039.9	-1,371.3	2,430.8	0.00	0.00	0.00
7,500.0	90.00	315.36	5,529.0	2,111.0	-1,441.6	2,530.7	0.00	0.00	0.00
7,600.0	90.00	315.36	5,529.0	2,182.2	-1,511.9	2,630.6	0.00	0.00	0.00
7,700.0	90.00	315.36	5,529.0	2,253.3	-1,582.1	2,730.6	0.00	0.00	0.00
7,800.0	90.00	315.36	5,529.0	2,324.5	-1,652.4	2,830.5	0.00	0.00	0.00
7,900.0	90.00	315.36	5,529.0	2,395.6	-1,722.7	2,930.4	0.00	0.00	0.00
8,000.0	90.00	315.36	5,529.0	2,466.8	-1,792.9	3,030.3	0.00	0.00	0.00
8,100.0	90.00	315.36	5,529.0	2,538.0	-1,863.2	3,130.3	0.00	0.00	0.00
8,200.0	90.00	315.36	5,529.0	2,609.1	-1,933.4	3,230.2	0.00	0.00	0.00
8,300.0	90.00	315.36	5,529.0	2,680.3	-2,003.7	3,330.1	0.00	0.00	0.00
8,400.0	90.00	315.36	5,529.0	2,751.4	-2,074.0	3,430.1	0.00	0.00	0.00
8,500.0	90.00	315.36	5,529.0	2,822.6	-2,144.2	3,530.0	0.00	0.00	0.00
8,600.0	90.00	315.36	5,529.0	2,893.7	-2,214.5	3,629.9	0.00	0.00	0.00
8,700.0	90.00	315.36	5,529.0	2,964.9	-2,284.7	3,729.8	0.00	0.00	0.00
8,800.0	90.00	315.36	5,529.0	3,036.1	-2,355.0	3,829.8	0.00	0.00	0.00
8,900.0	90.00	315.36	5,529.0	3,107.2	-2,425.3	3,929.7	0.00	0.00	0.00
9,000.0	90.00	315.36	5,529.0	3,178.4	-2,495.5	4,029.6	0.00	0.00	0.00
9,100.0	90.00	315.36	5,529.0	3,249.5	-2,565.8	4,129.5	0.00	0.00	0.00
9,200.0	90.00	315.36	5,529.0	3,320.7	-2,636.0	4,229.5	0.00	0.00	0.00
9,300.0	90.00	315.36	5,529.0	3,391.8	-2,706.3	4,329.4	0.00	0.00	0.00
9,400.0	90.00	315.36	5,529.0	3,463.0	-2,776.6	4,429.3	0.00	0.00	0.00
9,500.0	90.00	315.36	5,529.0	3,534.2	-2,846.8	4,529.2	0.00	0.00	0.00
9,600.0	90.00	315.36	5,529.0	3,605.3	-2,917.1	4,629.2	0.00	0.00	0.00
9,700.0	90.00	315.36	5,529.0	3,676.5	-2,987.4	4,729.1	0.00	0.00	0.00
9,800.0	90.00	315.36	5,529.0	3,747.6	-3,057.6	4,829.0	0.00	0.00	0.00
9,900.0	90.00	315.36	5,529.0	3,818.8	-3,127.9	4,928.9	0.00	0.00	0.00
10,000.0	90.00	315.36	5,529.0	3,889.9	-3,198.1	5,028.9	0.00	0.00	0.00
10,100.0	90.00	315.36	5,529.0	3,961.1	-3,268.4	5,128.8	0.00	0.00	0.00
10,200.0	90.00	315.36	5,529.0	4,032.3	-3,338.7	5,228.7	0.00	0.00	0.00
10,300.0	90.00	315.36	5,529.0	4,103.4	-3,408.9	5,328.7	0.00	0.00	0.00
10,400.0	90.00	315.36	5,529.0	4,174.6	-3,479.2	5,428.6	0.00	0.00	0.00
10,500.0	90.00	315.36	5,529.0	4,245.7	-3,549.4	5,528.5	0.00	0.00	0.00
10,600.0	90.00	315.36	5,529.0	4,316.9	-3,619.7	5,628.4	0.00	0.00	0.00
10,700.0	90.00	315.36	5,529.0	4,388.0	-3,690.0	5,728.4	0.00	0.00	0.00
10,800.0	90.00	315.36	5,529.0	4,459.2	-3,760.2	5,828.3	0.00	0.00	0.00
10,900.0	90.00	315.36	5,529.0	4,530.4	-3,830.5	5,928.2	0.00	0.00	0.00
11,000.0	90.00	315.36	5,529.0	4,601.5	-3,900.7	6,028.1	0.00	0.00	0.00

Planning Report

Database: EDM
Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 402H
Wellbore: Original drilling
Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
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)
11,100.0	90.00	315.36	5,529.0	4,672.7	-3,971.0	6,128.1	0.00	0.00	0.00
11,200.0	90.00	315.36	5,529.0	4,743.8	-4,041.3	6,228.0	0.00	0.00	0.00
11,300.0	90.00	315.36	5,529.0	4,815.0	-4,111.5	6,327.9	0.00	0.00	0.00
11,400.0	90.00	315.36	5,529.0	4,886.1	-4,181.8	6,427.8	0.00	0.00	0.00
11,500.0	90.00	315.36	5,529.0	4,957.3	-4,252.1	6,527.8	0.00	0.00	0.00
11,600.0	90.00	315.36	5,529.0	5,028.5	-4,322.3	6,627.7	0.00	0.00	0.00
11,700.0	90.00	315.36	5,529.0	5,099.6	-4,392.6	6,727.6	0.00	0.00	0.00
11,800.0	90.00	315.36	5,529.0	5,170.8	-4,462.8	6,827.6	0.00	0.00	0.00
11,900.0	90.00	315.36	5,529.0	5,241.9	-4,533.1	6,927.5	0.00	0.00	0.00
12,000.0	90.00	315.36	5,529.0	5,313.1	-4,603.4	7,027.4	0.00	0.00	0.00
12,100.0	90.00	315.36	5,529.0	5,384.2	-4,673.6	7,127.3	0.00	0.00	0.00
12,200.0	90.00	315.36	5,529.0	5,455.4	-4,743.9	7,227.3	0.00	0.00	0.00
12,300.0	90.00	315.36	5,529.0	5,526.6	-4,814.1	7,327.2	0.00	0.00	0.00
12,400.0	90.00	315.36	5,529.0	5,597.7	-4,884.4	7,427.1	0.00	0.00	0.00
12,500.0	90.00	315.36	5,529.0	5,668.9	-4,954.7	7,527.0	0.00	0.00	0.00
12,600.0	90.00	315.36	5,529.0	5,740.0	-5,024.9	7,627.0	0.00	0.00	0.00
12,700.0	90.00	315.36	5,529.0	5,811.2	-5,095.2	7,726.9	0.00	0.00	0.00
12,800.0	90.00	315.36	5,529.0	5,882.3	-5,165.5	7,826.8	0.00	0.00	0.00
12,900.0	90.00	315.36	5,529.0	5,953.5	-5,235.7	7,926.7	0.00	0.00	0.00
13,000.0	90.00	315.36	5,529.0	6,024.7	-5,306.0	8,026.7	0.00	0.00	0.00
13,100.0	90.00	315.36	5,529.0	6,095.8	-5,376.2	8,126.6	0.00	0.00	0.00
13,200.0	90.00	315.36	5,529.0	6,167.0	-5,446.5	8,226.5	0.00	0.00	0.00
13,300.0	90.00	315.36	5,529.0	6,238.1	-5,516.8	8,326.5	0.00	0.00	0.00
13,400.0	90.00	315.36	5,529.0	6,309.3	-5,587.0	8,426.4	0.00	0.00	0.00
13,500.0	90.00	315.36	5,529.0	6,380.4	-5,657.3	8,526.3	0.00	0.00	0.00
13,600.0	90.00	315.36	5,529.0	6,451.6	-5,727.5	8,626.2	0.00	0.00	0.00
13,700.0	90.00	315.36	5,529.0	6,522.8	-5,797.8	8,726.2	0.00	0.00	0.00
13,800.0	90.00	315.36	5,529.0	6,593.9	-5,868.1	8,826.1	0.00	0.00	0.00
13,900.0	90.00	315.36	5,529.0	6,665.1	-5,938.3	8,926.0	0.00	0.00	0.00
14,000.0	90.00	315.36	5,529.0	6,736.2	-6,008.6	9,025.9	0.00	0.00	0.00
14,100.0	90.00	315.36	5,529.0	6,807.4	-6,078.8	9,125.9	0.00	0.00	0.00
14,200.0	90.00	315.36	5,529.0	6,878.5	-6,149.1	9,225.8	0.00	0.00	0.00
14,300.0	90.00	315.36	5,529.0	6,949.7	-6,219.4	9,325.7	0.00	0.00	0.00
14,400.0	90.00	315.36	5,529.0	7,020.9	-6,289.6	9,425.6	0.00	0.00	0.00
14,500.0	90.00	315.36	5,529.0	7,092.0	-6,359.9	9,525.6	0.00	0.00	0.00
14,600.0	90.00	315.36	5,529.0	7,163.2	-6,430.2	9,625.5	0.00	0.00	0.00
14,700.0	90.00	315.36	5,529.0	7,234.3	-6,500.4	9,725.4	0.00	0.00	0.00
14,800.0	90.00	315.36	5,529.0	7,305.5	-6,570.7	9,825.3	0.00	0.00	0.00
14,900.0	90.00	315.36	5,529.0	7,376.7	-6,640.9	9,925.3	0.00	0.00	0.00
15,000.0	90.00	315.36	5,529.0	7,447.8	-6,711.2	10,025.2	0.00	0.00	0.00
15,100.0	90.00	315.36	5,529.0	7,519.0	-6,781.5	10,125.1	0.00	0.00	0.00
15,200.0	90.00	315.36	5,529.0	7,590.1	-6,851.7	10,225.1	0.00	0.00	0.00
15,300.0	90.00	315.36	5,529.0	7,661.3	-6,922.0	10,325.0	0.00	0.00	0.00
15,400.0	90.00	315.36	5,529.0	7,732.4	-6,992.2	10,424.9	0.00	0.00	0.00
15,500.0	90.00	315.36	5,529.0	7,803.6	-7,062.5	10,524.8	0.00	0.00	0.00
15,600.0	90.00	315.36	5,529.0	7,874.8	-7,132.8	10,624.8	0.00	0.00	0.00
15,700.0	90.00	315.36	5,529.0	7,945.9	-7,203.0	10,724.7	0.00	0.00	0.00
15,800.0	90.00	315.36	5,529.0	8,017.1	-7,273.3	10,824.6	0.00	0.00	0.00
15,900.0	90.00	315.36	5,529.0	8,088.2	-7,343.5	10,924.5	0.00	0.00	0.00
16,000.0	90.00	315.36	5,529.0	8,159.4	-7,413.8	11,024.5	0.00	0.00	0.00
16,100.0	90.00	315.36	5,529.0	8,230.5	-7,484.1	11,124.4	0.00	0.00	0.00
16,200.0	90.00	315.36	5,529.0	8,301.7	-7,554.3	11,224.3	0.00	0.00	0.00
16,300.0	90.00	315.36	5,529.0	8,372.9	-7,624.6	11,324.2	0.00	0.00	0.00
16,400.0	90.00	315.36	5,529.0	8,444.0	-7,694.9	11,424.2	0.00	0.00	0.00

Planning Report

Database: EDM
Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 402H
Wellbore: Original drilling
Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
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)
16,500.0	90.00	315.36	5,529.0	8,515.2	-7,765.1	11,524.1	0.00	0.00	0.00
16,600.0	90.00	315.36	5,529.0	8,586.3	-7,835.4	11,624.0	0.00	0.00	0.00
16,700.0	90.00	315.36	5,529.0	8,657.5	-7,905.6	11,724.0	0.00	0.00	0.00
16,800.0	90.00	315.36	5,529.0	8,728.6	-7,975.9	11,823.9	0.00	0.00	0.00
16,900.0	90.00	315.36	5,529.0	8,799.8	-8,046.2	11,923.8	0.00	0.00	0.00
16,910.2	90.00	315.36	5,529.0	8,807.0	-8,053.3	11,934.0	0.00	0.00	0.00

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
402H toe - plan hits target center - Circle (radius 100.0)	0.00	0.00	5,529.0	8,807.0	-8,053.3	1,936,179.28	2,744,856.23	36° 19' 15.864 N	107° 45' 34.023 W
402H heel - plan hits target center - Circle (radius 50.0)	0.00	0.00	5,529.0	989.5	-334.2	1,928,369.77	2,752,583.54	36° 17' 58.564 N	107° 43' 59.689 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
350.0	350.0	Surface casing	9-5/8	12-1/4
5,913.8	5,528.9	Intermediate casing	7	8-3/4

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,081.8	1,079.0	Ojo Alamo		0.00	
1,234.8	1,231.0	Kirtland		0.00	
1,627.4	1,621.0	Fruitland		0.00	
1,850.9	1,843.0	Picture Cliffs		0.00	
1,946.6	1,938.0	Lewis		0.00	
2,698.7	2,685.0	Chacra		0.00	
3,346.0	3,328.0	Menefee		0.00	
4,263.2	4,239.0	Point Lookout		0.00	
4,480.7	4,455.0	Mancos		0.00	
4,861.2	4,833.0	Mancos Silt		0.00	
5,303.3	5,251.0	Gallup A		0.00	
5,352.0	5,290.0	Gallup B		0.00	
5,489.3	5,387.0	Gallup C		0.00	
5,923.8	5,529.0	Target		0.00	

Planning Report

Database: EDM
Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 402H
Wellbore: Original drilling
Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
North Reference: True
Survey Calculation Method: Minimum Curvature

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,968.0	4,939.0	498.9	73.0	KOP
5,714.0	5,494.9	840.6	-191.6	Top of liner

DJR Operating

Blanco Wash Unit

I24A 2409

402H

Original drilling

APD

Anticollision Report

26 April, 2019

Anticollision Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well # 402H
Project:	Blanco Wash Unit	TVD Reference:	RKB @ 6906.0usft (RIG)
Reference Site:	I24A 2409	MD Reference:	RKB @ 6906.0usft (RIG)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	# 402H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Original drilling	Database:	EDM
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference	APD		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	4/26/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	16,910.2	APD (Original drilling)	MWD+IGRF	OWSG MWD + IGRF or WMM

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
I24 2409 (Encana)						
# 401H - Original drilling - As drilled	3,328.4	3,296.5	197.0	172.7	8.123 CC	
# 401H - Original drilling - As drilled	3,400.0	3,367.5	197.2	172.4	7.953 ES	
# 401H - Original drilling - As drilled	3,900.0	3,862.4	210.6	182.2	7.398 SF	
I24A 2409						
# 403H - Original drilling - APD	450.0	450.0	29.9	27.1	10.620 CC, ES	
# 403H - Original drilling - APD	16,910.2	16,965.4	1,267.8	681.4	2.162 SF	

Offset Design												I24 2409 (Encana) - # 401H - Original drilling - As drilled		Offset Site Error: 0.0 usft	
Survey Program: 150-GYRO-NS, 4920-MWD - no corrections														Offset Well Error: 0.0 usft	
Reference	Offset	Semi Major Axis		Distance											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-20.78	363.1	-137.8	388.6						
100.0	100.0	88.6	88.6	0.2	0.1	-20.76	363.0	-137.6	388.2	387.9	0.30	1,307.677			
200.0	200.0	189.7	189.7	0.5	0.4	-20.68	362.6	-136.9	387.6	386.7	0.89	434.159			
300.0	300.0	289.0	289.0	0.9	0.7	-20.64	362.1	-136.4	387.0	385.4	1.60	242.067			
400.0	400.0	388.7	388.7	1.2	1.1	-20.60	361.8	-136.0	386.5	384.2	2.31	167.614			
450.0	450.0	438.5	438.5	1.4	1.3	-20.59	361.6	-135.8	386.3	383.6	2.66	145.242			
500.0	500.0	488.1	488.1	1.6	1.4	-28.93	361.5	-135.7	385.7	382.7	3.01	128.036			
600.0	599.9	587.3	587.3	1.9	1.8	-29.20	361.3	-135.5	382.5	378.8	3.72	102.828			
700.0	699.7	687.7	687.7	2.3	2.1	-29.80	361.2	-135.6	376.3	371.9	4.43	84.881			
782.7	781.9	770.5	770.5	2.6	2.4	-30.54	360.9	-135.5	368.8	363.7	5.03	73.342			
800.0	799.1	787.5	787.5	2.7	2.5	-30.70	360.8	-135.5	367.0	361.8	5.15	71.217			
900.0	898.5	886.3	886.3	3.1	2.8	-31.66	360.5	-135.5	356.7	350.8	5.86	60.822			
1,000.0	997.8	985.3	985.3	3.5	3.2	-32.67	360.3	-135.5	346.7	340.1	6.58	52.681			
1,100.0	1,097.1	1,084.4	1,084.4	3.9	3.5	-33.71	360.2	-135.4	336.9	329.6	7.30	46.141			
1,200.0	1,196.4	1,183.5	1,183.5	4.3	3.9	-34.83	360.2	-135.3	327.2	319.2	8.02	40.782			
1,300.0	1,295.8	1,282.3	1,282.3	4.7	4.2	-36.01	360.3	-135.4	317.8	309.1	8.75	36.338			
1,400.0	1,395.1	1,381.9	1,381.9	5.1	4.5	-37.29	360.3	-135.4	308.6	299.1	9.48	32.567			
1,500.0	1,494.4	1,481.2	1,481.2	5.5	4.9	-38.68	360.2	-135.7	299.4	289.2	10.21	29.337			
1,600.0	1,593.7	1,579.9	1,579.9	5.9	5.2	-40.15	360.2	-136.0	290.6	279.7	10.94	26.566			
1,700.0	1,693.1	1,680.3	1,680.3	6.3	5.6	-41.75	360.1	-136.4	282.0	270.3	11.68	24.138			
1,800.0	1,792.4	1,779.0	1,779.0	6.7	5.9	-43.46	359.8	-136.8	273.4	261.0	12.42	22.009			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
 Project: Blanco Wash Unit
 Reference Site: I24A 2409
 Site Error: 0.0 usft
 Reference Well: # 402H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 402H
 TVD Reference: RKB @ 6906.0usft (RIG)
 MD Reference: RKB @ 6906.0usft (RIG)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design I24 2409 (Encana) - # 401H - Original drilling - As drilled													Offset Site Error: 0.0 usft
Survey Program: 150-GYRO-NS, 4920-MWD - no corrections													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
1,900.0	1,891.7	1,878.6	1,878.6	7.1	6.3	-45.36	359.4	-137.5	265.2	252.0	13.17	20.133	
2,000.0	1,991.1	1,978.3	1,978.2	7.5	6.6	-47.41	358.8	-138.3	257.2	243.2	13.93	18.464	
2,100.0	2,090.4	2,076.9	2,076.9	7.9	7.0	-49.56	358.2	-139.0	249.5	234.8	14.68	16.990	
2,200.0	2,189.7	2,176.1	2,176.0	8.4	7.3	-51.78	358.0	-139.6	242.4	226.9	15.44	15.692	
2,300.0	2,289.0	2,275.3	2,275.3	8.8	7.7	-54.10	357.9	-140.2	235.7	219.5	16.21	14.539	
2,400.0	2,388.4	2,375.5	2,375.4	9.2	8.0	-56.56	357.7	-140.6	229.2	212.2	16.98	13.497	
2,500.0	2,487.7	2,474.8	2,474.7	9.6	8.4	-59.22	357.2	-141.0	223.0	205.2	17.76	12.556	
2,600.0	2,587.0	2,573.6	2,573.6	10.0	8.7	-62.06	356.5	-141.7	217.3	198.8	18.54	11.723	
2,700.0	2,686.3	2,672.8	2,672.8	10.4	9.1	-65.06	355.8	-142.5	212.5	193.2	19.32	10.996	
2,800.0	2,785.7	2,772.6	2,772.5	10.8	9.4	-68.20	355.2	-143.1	208.1	187.9	20.11	10.345	
2,900.0	2,885.0	2,871.6	2,871.5	11.3	9.8	-71.52	354.3	-143.8	204.2	183.3	20.90	9.771	
3,000.0	2,984.3	2,971.2	2,971.1	11.7	10.1	-74.97	353.3	-144.6	201.1	179.4	21.69	9.272	
3,100.0	3,083.6	3,069.3	3,069.2	12.1	10.4	-78.53	352.2	-145.4	198.8	176.3	22.47	8.846	
3,200.0	3,183.0	3,168.9	3,168.8	12.5	10.8	-82.29	350.8	-146.6	197.6	174.4	23.26	8.497	
3,300.0	3,282.3	3,268.3	3,268.2	12.9	11.1	-86.07	349.5	-147.6	197.0	173.0	24.03	8.199	
3,328.4	3,310.5	3,296.5	3,296.4	13.0	11.2	-87.14	349.1	-147.8	197.0	172.7	24.25	8.123 CC	
3,400.0	3,381.6	3,367.5	3,367.4	13.3	11.5	-89.85	348.1	-148.4	197.2	172.4	24.80	7.953 ES	
3,500.0	3,480.9	3,466.5	3,466.4	13.7	11.8	-93.56	346.8	-149.3	198.3	172.8	25.56	7.760	
3,600.0	3,580.3	3,566.4	3,566.2	14.2	12.2	-97.25	345.6	-150.0	200.0	173.7	26.31	7.605	
3,700.0	3,679.6	3,665.0	3,664.8	14.6	12.5	-100.93	343.9	-150.7	202.7	175.6	27.04	7.495	
3,800.0	3,778.9	3,764.1	3,763.9	15.0	12.9	-104.51	342.2	-151.5	206.2	178.4	27.76	7.427	
3,900.0	3,878.3	3,862.4	3,862.2	15.4	13.2	-108.01	340.3	-152.4	210.6	182.2	28.47	7.398 SF	
4,000.0	3,977.6	3,961.2	3,961.0	15.8	13.6	-111.41	338.1	-153.6	216.2	187.0	29.17	7.411	
4,100.0	4,076.9	4,060.8	4,060.5	16.2	13.9	-114.64	336.1	-154.6	222.2	192.3	29.87	7.440	
4,200.0	4,176.2	4,159.9	4,159.6	16.6	14.3	-117.68	334.0	-155.5	228.9	198.4	30.55	7.492	
4,300.0	4,275.6	4,260.3	4,260.0	17.1	14.6	-120.50	332.4	-156.5	236.1	204.8	31.25	7.555	
4,400.0	4,374.9	4,359.9	4,359.6	17.5	15.0	-123.01	331.3	-157.1	243.2	211.3	31.94	7.616	
4,500.0	4,474.2	4,458.6	4,458.3	17.9	15.3	-125.31	330.5	-157.9	250.8	218.2	32.62	7.690	
4,600.0	4,573.5	4,558.7	4,558.3	18.3	15.7	-127.53	329.5	-158.6	258.8	225.5	33.31	7.769	
4,700.0	4,672.9	4,657.0	4,656.7	18.7	16.0	-129.61	328.5	-159.1	267.0	233.1	33.98	7.858	
4,800.0	4,772.2	4,756.8	4,756.5	19.1	16.4	-131.60	327.5	-159.7	275.7	241.0	34.67	7.952	
4,900.0	4,871.5	4,855.6	4,855.3	19.6	16.7	-133.43	326.4	-160.3	284.6	249.3	35.34	8.053	
4,968.3	4,939.4	4,920.0	4,919.7	19.8	16.8	-134.56	325.9	-160.7	290.9	255.2	35.70	8.148	
5,000.0	4,970.8	4,943.3	4,942.9	20.0	16.9	-139.45	325.8	-161.5	294.4	258.6	35.75	8.235	
5,050.0	5,019.9	4,973.2	4,972.6	20.2	16.9	-106.70	326.0	-164.7	301.9	266.2	35.71	8.456	
5,100.0	5,068.3	5,007.4	5,006.2	20.4	16.9	-100.14	326.2	-171.0	312.0	276.3	35.67	8.747	
5,150.0	5,115.6	5,063.6	5,060.9	20.7	16.9	-96.86	329.2	-183.6	321.7	285.7	36.05	8.924	
5,200.0	5,161.6	5,108.5	5,103.9	21.0	16.9	-94.73	333.8	-195.6	331.2	294.9	36.26	9.134	
5,250.0	5,205.9	5,142.0	5,135.4	21.3	16.9	-93.02	338.3	-206.2	341.2	305.0	36.28	9.406	
5,300.0	5,248.2	5,182.7	5,172.6	21.6	16.9	-91.98	344.5	-221.4	352.5	316.0	36.48	9.664	
5,350.0	5,288.5	5,219.2	5,205.1	22.0	16.9	-91.14	350.4	-236.9	365.1	328.4	36.63	9.967	
5,400.0	5,326.2	5,260.6	5,240.8	22.3	17.0	-90.68	357.9	-256.6	378.5	341.6	36.95	10.245	
5,450.0	5,361.4	5,303.8	5,276.4	22.8	17.1	-90.39	367.2	-279.0	392.3	354.9	37.36	10.500	
5,500.0	5,393.6	5,345.3	5,308.9	23.2	17.2	-90.08	377.5	-302.7	406.5	368.7	37.81	10.751	
5,550.0	5,422.8	5,386.9	5,339.5	23.7	17.3	-89.76	389.3	-328.5	421.1	382.8	38.34	10.985	
5,600.0	5,448.7	5,428.0	5,367.2	24.2	17.4	-89.37	402.1	-355.9	436.2	397.3	38.93	11.206	
5,650.0	5,471.3	5,459.0	5,386.5	24.8	17.6	-88.63	412.3	-377.9	452.0	412.6	39.37	11.480	
5,700.0	5,490.2	5,491.0	5,404.7	25.4	17.7	-87.88	422.8	-402.0	468.9	429.0	39.92	11.748	
5,750.0	5,505.5	5,523.0	5,421.1	26.1	17.9	-87.08	433.2	-427.4	487.1	446.6	40.53	12.019	
5,800.0	5,517.0	5,547.6	5,432.4	26.8	18.1	-85.96	440.8	-447.9	506.7	465.7	41.03	12.350	
5,850.0	5,524.7	5,568.9	5,441.3	27.5	18.3	-84.66	446.9	-466.3	527.8	486.4	41.49	12.722	
5,900.0	5,528.6	5,586.0	5,447.9	28.3	18.4	-83.13	451.3	-481.5	550.5	508.7	41.87	13.148	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
 Project: Blanco Wash Unit
 Reference Site: I24A 2409
 Site Error: 0.0 usft
 Reference Well: # 402H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 402H
 TVD Reference: RKB @ 6906.0usft (RIG)
 MD Reference: RKB @ 6906.0usft (RIG)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design I24 2409 (Encana) - # 401H - Original drilling - As drilled													Offset Site Error:	0.0 usft
Survey Program: 150-GYRO-NS, 4920-MWD - no corrections													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,923.8	5,529.0	5,599.1	5,452.6	28.6	18.6	-82.62	454.4	-493.3	561.8	519.6	42.20	13.313		
6,000.0	5,529.0	5,634.0	5,463.6	29.9	18.9	-84.10	461.8	-525.6	600.3	557.2	43.06	13.939		
6,100.0	5,529.0	5,670.1	5,472.4	31.6	19.3	-85.27	468.1	-560.0	656.2	612.3	43.91	14.945		
6,200.0	5,529.0	5,694.0	5,476.8	33.4	19.6	-85.87	470.8	-583.3	718.4	674.0	44.34	16.202		
6,300.0	5,529.0	5,733.4	5,482.0	35.3	20.0	-86.57	472.9	-622.3	785.3	740.0	45.28	17.342		
6,400.0	5,529.0	5,777.0	5,484.9	37.3	20.6	-87.02	473.1	-665.8	855.7	809.3	46.41	18.440		
6,500.0	5,529.0	5,823.0	5,486.8	39.4	21.2	-87.36	472.3	-711.7	928.0	880.3	47.67	19.465		
6,600.0	5,529.0	5,892.6	5,488.3	41.4	22.3	-87.68	470.3	-781.3	1,001.1	951.2	49.92	20.055		
6,700.0	5,529.0	5,942.0	5,489.6	43.6	23.0	-87.90	468.4	-830.6	1,074.7	1,023.3	51.48	20.877		
6,800.0	5,529.0	6,010.3	5,492.1	45.7	24.2	-88.22	465.2	-898.8	1,149.1	1,095.2	53.91	21.316		
6,900.0	5,529.0	6,093.5	5,492.2	47.9	25.7	-88.36	462.0	-981.9	1,222.9	1,165.9	57.06	21.432		
7,000.0	5,529.0	6,155.2	5,491.2	50.2	26.8	-88.38	460.0	-1,043.6	1,296.3	1,236.9	59.39	21.826		
7,100.0	5,529.0	6,226.4	5,489.9	52.4	28.2	-88.39	457.5	-1,114.7	1,369.9	1,307.7	62.22	22.018		
7,200.0	5,529.0	6,277.0	5,489.6	54.7	29.2	-88.43	455.5	-1,165.3	1,443.8	1,379.6	64.18	22.495		
7,300.0	5,529.0	6,343.1	5,489.7	57.0	30.6	-88.52	452.4	-1,231.3	1,518.2	1,451.3	66.90	22.693		
7,400.0	5,529.0	6,408.3	5,489.4	59.3	31.9	-88.57	449.4	-1,296.5	1,592.5	1,522.8	69.63	22.870		
7,500.0	5,529.0	6,480.2	5,488.3	61.6	33.4	-88.58	446.1	-1,368.2	1,666.8	1,594.1	72.71	22.922		
7,600.0	5,529.0	6,545.0	5,486.8	64.0	34.8	-88.57	443.3	-1,433.0	1,740.9	1,665.4	75.51	23.055		
7,700.0	5,529.0	6,582.2	5,486.1	66.3	35.7	-88.56	441.4	-1,470.2	1,815.6	1,738.6	77.00	23.579		
7,800.0	5,529.0	6,623.4	5,485.7	68.7	36.6	-88.58	438.5	-1,511.2	1,891.5	1,812.8	78.69	24.037		
7,900.0	5,529.0	6,697.4	5,485.0	71.0	38.2	-88.61	433.1	-1,585.0	1,967.6	1,885.6	82.02	23.990		
8,000.0	5,529.0	6,783.4	5,483.1	73.4	40.1	-88.60	427.6	-1,670.9	2,043.2	1,957.2	85.97	23.766		
8,100.0	5,529.0	6,857.1	5,481.4	75.8	41.8	-88.59	423.3	-1,744.4	2,118.2	2,028.9	89.34	23.710		
8,200.0	5,529.0	6,917.1	5,481.1	78.2	43.2	-88.62	419.9	-1,804.3	2,193.3	2,101.2	92.06	23.826		
8,300.0	5,529.0	6,989.8	5,480.6	80.6	44.8	-88.65	415.7	-1,876.8	2,268.4	2,173.0	95.42	23.772		
8,400.0	5,529.0	7,039.6	5,480.0	83.0	46.0	-88.66	412.8	-1,926.6	2,343.6	2,245.9	97.67	23.996		
8,500.0	5,529.0	7,082.8	5,479.4	85.4	47.0	-88.66	409.9	-1,969.7	2,419.3	2,319.7	99.58	24.294		
8,600.0	5,529.0	7,116.0	5,479.0	87.8	47.8	-88.67	407.4	-2,002.8	2,495.7	2,394.7	100.99	24.711		
8,700.0	5,529.0	7,164.5	5,478.5	90.2	48.9	-88.68	403.2	-2,051.1	2,572.6	2,469.4	103.18	24.932		
8,800.0	5,529.0	7,242.1	5,477.8	92.6	50.7	-88.71	396.5	-2,128.4	2,649.6	2,542.7	106.87	24.792		
8,900.0	5,529.0	7,292.7	5,477.1	95.0	51.9	-88.71	392.2	-2,178.8	2,726.4	2,617.2	109.20	24.968		
9,000.0	5,529.0	7,390.3	5,475.2	97.4	54.2	-88.71	383.9	-2,276.0	2,803.4	2,689.4	113.93	24.606		
9,100.0	5,529.0	7,456.4	5,473.2	99.9	55.8	-88.68	378.8	-2,342.0	2,879.8	2,762.7	117.07	24.599		
9,200.0	5,529.0	7,496.0	5,472.4	102.3	56.7	-88.68	375.7	-2,381.4	2,956.3	2,837.4	118.86	24.873		
9,300.0	5,529.0	7,534.9	5,472.0	104.7	57.7	-88.69	372.4	-2,420.1	3,033.3	2,912.7	120.61	25.150		
9,400.0	5,529.0	7,705.4	5,469.7	107.2	61.7	-88.71	358.8	-2,590.0	3,110.1	2,981.0	129.11	24.089		
9,500.0	5,529.0	7,847.3	5,468.0	109.6	65.2	-88.72	352.4	-2,731.8	3,184.2	3,048.1	136.11	23.394		
9,600.0	5,529.0	7,888.6	5,467.2	112.1	66.2	-88.72	350.7	-2,773.1	3,258.2	3,120.1	138.05	23.601		
9,700.0	5,529.0	8,112.5	5,465.0	114.5	71.7	-88.76	347.6	-2,996.9	3,329.3	3,180.2	149.08	22.332		
9,800.0	5,529.0	8,177.9	5,465.3	117.0	73.3	-88.78	347.6	-3,062.3	3,400.4	3,248.1	152.27	22.331		
9,900.0	5,529.0	8,249.3	5,465.3	119.4	75.1	-88.81	347.7	-3,133.7	3,471.4	3,315.7	155.76	22.287		
10,000.0	5,529.0	8,333.7	5,464.1	121.8	77.1	-88.81	348.1	-3,218.1	3,542.3	3,382.4	159.88	22.155		
10,100.0	5,529.0	8,384.0	5,462.9	124.3	78.4	-88.80	348.3	-3,268.3	3,613.2	3,450.8	162.34	22.257		
10,200.0	5,529.0	8,415.5	5,462.2	126.8	79.2	-88.80	348.2	-3,299.8	3,684.7	3,520.8	163.86	22.486		
10,300.0	5,529.0	8,448.0	5,461.8	129.2	80.0	-88.80	347.6	-3,332.3	3,756.9	3,591.5	165.42	22.711		
10,400.0	5,529.0	8,470.1	5,461.6	131.7	80.5	-88.80	347.0	-3,354.4	3,830.0	3,663.5	166.45	23.010		
10,500.0	5,529.0	8,511.0	5,461.6	134.1	81.5	-88.81	345.3	-3,395.3	3,903.8	3,735.4	168.40	23.181		
10,600.0	5,529.0	8,551.5	5,461.5	136.6	82.5	-88.83	343.4	-3,435.7	3,978.1	3,807.8	170.34	23.355		
10,700.0	5,529.0	8,643.2	5,460.4	139.0	84.8	-88.83	339.5	-3,527.3	4,052.2	3,877.3	174.87	23.172		
10,800.0	5,529.0	8,663.4	5,460.1	141.5	85.3	-88.83	338.5	-3,547.5	4,126.5	3,950.8	175.77	23.477		
10,900.0	5,529.0	8,726.7	5,459.9	144.0	86.8	-88.85	334.9	-3,610.7	4,201.6	4,022.7	178.87	23.490		
11,000.0	5,529.0	8,854.3	5,459.2	146.4	90.0	-88.87	329.7	-3,738.2	4,275.3	4,090.0	185.25	23.078		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
 Project: Blanco Wash Unit
 Reference Site: I24A 2409
 Site Error: 0.0 usft
 Reference Well: # 402H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 402H
 TVD Reference: RKB @ 6906.0usft (RIG)
 MD Reference: RKB @ 6906.0usft (RIG)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design I24 2409 (Encana) - # 401H - Original drilling - As drilled													Offset Site Error: 0.0 usft
Survey Program: 150-GYRO-NS, 4920-MWD - no corrections													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,100.0	5,529.0	9,124.4	5,453.9	148.9	96.7	-88.85	324.8	-4,008.1	4,348.5	4,149.8	198.66	21.889	
11,200.0	5,529.0	9,181.5	5,453.0	151.3	98.1	-88.84	325.4	-4,065.2	4,418.9	4,217.4	201.49	21.931	
11,300.0	5,529.0	9,209.0	5,452.6	153.8	98.8	-88.84	325.4	-4,092.7	4,490.0	4,287.2	202.85	22.134	
11,400.0	5,529.0	9,245.1	5,452.0	156.3	99.7	-88.84	325.2	-4,128.8	4,561.7	4,357.1	204.63	22.293	
11,500.0	5,529.0	9,283.8	5,451.3	158.7	100.7	-88.84	324.6	-4,167.5	4,633.9	4,427.4	206.52	22.438	
11,600.0	5,529.0	9,341.6	5,451.3	161.2	102.1	-88.85	323.4	-4,225.3	4,706.5	4,497.1	209.38	22.479	
11,700.0	5,529.0	9,477.1	5,450.5	163.7	105.5	-88.88	321.4	-4,360.8	4,778.7	4,562.6	216.11	22.112	
11,800.0	5,529.0	9,526.0	5,450.0	166.1	106.7	-88.88	321.0	-4,409.7	4,850.5	4,632.0	218.53	22.196	
11,900.0	5,529.0	9,568.9	5,449.8	168.6	107.8	-88.88	320.4	-4,452.5	4,922.6	4,702.0	220.64	22.311	
12,000.0	5,529.0	9,607.0	5,449.6	171.1	108.8	-88.89	319.7	-4,490.7	4,995.1	4,772.6	222.51	22.449	
12,100.0	5,529.0	9,653.0	5,449.3	173.6	109.9	-88.90	318.5	-4,536.6	5,068.1	4,843.3	224.76	22.548	
12,200.0	5,529.0	9,653.0	5,449.3	176.0	109.9	-88.90	318.5	-4,536.6	5,141.5	4,916.9	224.68	22.884	
12,300.0	5,529.0	9,692.4	5,449.0	178.5	110.9	-88.90	317.0	-4,576.0	5,215.5	4,988.9	226.58	23.018	
12,400.0	5,529.0	9,716.0	5,448.8	181.0	111.5	-88.90	315.8	-4,599.6	5,290.0	5,062.4	227.67	23.235	
12,500.0	5,529.0	9,716.0	5,448.8	183.4	111.5	-88.90	315.8	-4,599.6	5,365.3	5,137.8	227.53	23.581	
12,600.0	5,529.0	9,753.2	5,448.6	185.9	112.4	-88.91	313.4	-4,636.7	5,440.9	5,211.6	229.29	23.729	
12,700.0	5,529.0	9,780.0	5,448.5	188.4	113.1	-88.91	311.4	-4,663.4	5,517.2	5,286.6	230.51	23.934	
12,800.0	5,529.0	9,780.0	5,448.5	190.9	113.1	-88.91	311.4	-4,663.4	5,594.0	5,363.6	230.31	24.288	
12,900.0	5,529.0	9,810.7	5,448.5	193.3	113.8	-88.92	308.6	-4,694.0	5,671.2	5,439.5	231.72	24.475	
13,000.0	5,529.0	9,843.0	5,448.5	195.8	114.6	-88.93	305.3	-4,726.1	5,749.0	5,515.8	233.20	24.652	
13,100.0	5,529.0	9,860.9	5,448.5	198.3	115.1	-88.93	303.4	-4,743.9	5,827.2	5,593.3	233.92	24.911	
13,200.0	5,529.0	9,907.0	5,448.0	200.8	116.2	-88.93	298.4	-4,789.7	5,905.6	5,669.5	236.13	25.010	
13,300.0	5,529.0	9,945.5	5,447.3	203.2	117.1	-88.93	294.0	-4,828.0	5,984.3	5,746.3	237.94	25.151	
13,400.0	5,529.0	9,985.3	5,446.3	205.7	118.1	-88.93	289.4	-4,867.5	6,063.2	5,823.3	239.81	25.283	
13,500.0	5,529.0	10,020.0	5,445.5	208.2	119.0	-88.92	285.3	-4,902.0	6,142.2	5,900.8	241.41	25.443	
13,600.0	5,529.0	10,020.0	5,445.5	210.7	119.0	-88.92	285.3	-4,902.0	6,221.8	5,980.6	241.15	25.800	
13,700.0	5,529.0	10,020.0	5,445.5	213.1	119.0	-88.92	285.3	-4,902.0	6,301.9	6,061.0	240.87	26.163	
13,800.0	5,529.0	10,020.0	5,445.5	215.6	119.0	-88.92	285.3	-4,902.0	6,382.6	6,142.0	240.58	26.530	
13,900.0	5,529.0	10,020.0	5,445.5	218.1	119.0	-88.92	285.3	-4,902.0	6,463.8	6,223.5	240.27	26.902	
14,000.0	5,529.0	10,020.0	5,445.5	220.6	119.0	-88.92	285.3	-4,902.0	6,545.6	6,305.6	239.96	27.278	
14,100.0	5,529.0	10,020.0	5,445.5	223.1	119.0	-88.92	285.3	-4,902.0	6,627.8	6,388.2	239.64	27.658	
14,200.0	5,529.0	10,020.0	5,445.5	225.5	119.0	-88.92	285.3	-4,902.0	6,710.6	6,471.3	239.31	28.042	
14,300.0	5,529.0	10,020.0	5,445.5	228.0	119.0	-88.92	285.3	-4,902.0	6,793.8	6,554.8	238.97	28.430	
14,400.0	5,529.0	10,020.0	5,445.5	230.5	119.0	-88.92	285.3	-4,902.0	6,877.4	6,638.8	238.62	28.821	
14,500.0	5,529.0	10,020.0	5,445.5	233.0	119.0	-88.92	285.3	-4,902.0	6,961.5	6,723.2	238.27	29.217	
14,600.0	5,529.0	10,020.0	5,445.5	235.5	119.0	-88.92	285.3	-4,902.0	7,046.0	6,808.1	237.92	29.615	
14,700.0	5,529.0	10,020.0	5,445.5	237.9	119.0	-88.92	285.3	-4,902.0	7,130.9	6,893.3	237.56	30.017	
14,800.0	5,529.0	10,020.0	5,445.5	240.4	119.0	-88.92	285.3	-4,902.0	7,216.2	6,979.0	237.20	30.423	
14,900.0	5,529.0	10,020.0	5,445.5	242.9	119.0	-88.92	285.3	-4,902.0	7,301.8	7,065.0	236.83	30.831	
15,000.0	5,529.0	10,020.0	5,445.5	245.4	119.0	-88.92	285.3	-4,902.0	7,387.8	7,151.4	236.47	31.243	
15,100.0	5,529.0	10,020.0	5,445.5	247.9	119.0	-88.92	285.3	-4,902.0	7,474.2	7,238.1	236.10	31.657	
15,200.0	5,529.0	10,020.0	5,445.5	250.3	119.0	-88.92	285.3	-4,902.0	7,560.9	7,325.2	235.73	32.075	
15,300.0	5,529.0	10,020.0	5,445.5	252.8	119.0	-88.92	285.3	-4,902.0	7,647.9	7,412.6	235.36	32.495	
15,400.0	5,529.0	10,020.0	5,445.5	255.3	119.0	-88.92	285.3	-4,902.0	7,735.3	7,500.3	234.99	32.918	
15,500.0	5,529.0	10,020.0	5,445.5	257.8	119.0	-88.92	285.3	-4,902.0	7,822.9	7,588.3	234.62	33.343	
15,600.0	5,529.0	10,020.0	5,445.5	260.3	119.0	-88.92	285.3	-4,902.0	7,910.9	7,676.6	234.25	33.771	
15,700.0	5,529.0	10,020.0	5,445.5	262.7	119.0	-88.92	285.3	-4,902.0	7,999.1	7,765.2	233.88	34.202	
15,800.0	5,529.0	10,020.0	5,445.5	265.2	119.0	-88.92	285.3	-4,902.0	8,087.6	7,854.1	233.51	34.634	
15,900.0	5,529.0	10,020.0	5,445.5	267.7	119.0	-88.92	285.3	-4,902.0	8,176.3	7,943.2	233.15	35.070	
16,000.0	5,529.0	10,020.0	5,445.5	270.2	119.0	-88.92	285.3	-4,902.0	8,265.3	8,032.6	232.78	35.507	
16,100.0	5,529.0	10,020.0	5,445.5	272.7	119.0	-88.92	285.3	-4,902.0	8,354.6	8,122.2	232.42	35.947	
16,200.0	5,529.0	10,020.0	5,445.5	275.2	119.0	-88.92	285.3	-4,902.0	8,444.1	8,212.1	232.06	36.388	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
Project: Blanco Wash Unit
Reference Site: I24A 2409
Site Error: 0.0 usft
Reference Well: # 402H
Well Error: 0.0 usft
Reference Wellbore: Original drilling
Reference Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM
Offset TVD Reference: Offset Datum

Offset Design I24 2409 (Encana) - # 401H - Original drilling - As drilled												Offset Site Error:	0.0 usft
Survey Program: 150-GYRO-NS, 4920-MWD - no corrections												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
16,300.0	5,529.0	10,020.0	5,445.5	277.6	119.0	-88.92	285.3	-4,902.0	8,533.9	8,302.2	231.70	36.832	
16,400.0	5,529.0	10,020.0	5,445.5	280.1	119.0	-88.92	285.3	-4,902.0	8,623.8	8,392.5	231.34	37.278	
16,500.0	5,529.0	10,020.0	5,445.5	282.6	119.0	-88.92	285.3	-4,902.0	8,714.0	8,483.0	230.99	37.725	
16,600.0	5,529.0	10,020.0	5,445.5	285.1	119.0	-88.92	285.3	-4,902.0	8,804.4	8,573.8	230.63	38.175	
16,700.0	5,529.0	10,020.0	5,445.5	287.6	119.0	-88.92	285.3	-4,902.0	8,895.0	8,664.7	230.29	38.626	
16,800.0	5,529.0	10,020.0	5,445.5	290.1	119.0	-88.92	285.3	-4,902.0	8,985.8	8,755.9	229.94	39.079	
16,900.0	5,529.0	10,020.0	5,445.5	292.5	119.0	-88.92	285.3	-4,902.0	9,076.8	8,847.2	229.60	39.534	
16,910.2	5,529.0	10,020.0	5,445.5	292.8	119.0	-88.92	285.3	-4,902.0	9,086.1	8,856.5	229.56	39.580	

Anticollision Report

Company: DJR Operating
 Project: Blanco Wash Unit
 Reference Site: I24A 2409
 Site Error: 0.0 usft
 Reference Well: # 402H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 402H
 TVD Reference: RKB @ 6906.0usft (RIG)
 MD Reference: RKB @ 6906.0usft (RIG)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design I24A 2409 - # 403H - Original drilling - APD													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+IGRF													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance			Minimum Separation			Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-151.15	-26.2	-14.4	29.9				
100.0	100.0	100.0	100.0	0.2	0.2	-151.15	-26.2	-14.4	29.9	29.6	0.31	97.065	
200.0	200.0	200.0	200.0	0.5	0.5	-151.15	-26.2	-14.4	29.9	28.9	1.03	29.188	
300.0	300.0	300.0	300.0	0.9	0.9	-151.15	-26.2	-14.4	29.9	28.2	1.74	17.176	
400.0	400.0	400.0	400.0	1.2	1.2	-151.15	-26.2	-14.4	29.9	27.5	2.46	12.169	
450.0	450.0	450.0	450.0	1.4	1.4	-151.15	-26.2	-14.4	29.9	27.1	2.82	10.620 CC, ES	
500.0	500.0	499.6	499.6	1.6	1.6	-159.21	-26.4	-14.8	30.7	27.5	3.17	9.672	
600.0	599.9	598.5	598.5	1.9	1.9	-157.54	-27.5	-18.1	36.5	32.7	3.87	9.437	
700.0	699.7	696.7	696.4	2.3	2.3	-155.40	-29.8	-24.4	48.3	43.7	4.58	10.544	
782.7	781.9	776.9	776.2	2.6	2.6	-153.87	-32.4	-32.0	62.4	57.3	5.17	12.079	
800.0	799.1	793.6	792.8	2.7	2.6	-153.60	-33.1	-33.8	65.9	60.6	5.29	12.439	
900.0	898.5	889.2	887.4	3.1	3.0	-151.74	-37.4	-46.1	87.2	81.2	5.99	14.549	
1,000.0	997.8	984.9	981.9	3.5	3.4	-149.80	-42.7	-61.0	111.0	104.3	6.70	16.559	
1,100.0	1,097.1	1,081.9	1,077.5	3.9	3.8	-148.43	-48.2	-76.5	135.2	127.8	7.43	18.197	
1,200.0	1,196.4	1,178.9	1,173.1	4.3	4.3	-147.47	-53.7	-91.9	159.5	151.3	8.16	19.541	
1,300.0	1,295.8	1,275.9	1,268.7	4.7	4.7	-146.77	-59.1	-107.4	183.8	174.9	8.90	20.648	
1,400.0	1,395.1	1,372.9	1,364.3	5.1	5.2	-146.23	-64.6	-122.8	208.1	198.5	9.64	21.582	
1,500.0	1,494.4	1,469.9	1,459.8	5.5	5.6	-145.81	-70.1	-138.3	232.4	222.1	10.39	22.378	
1,600.0	1,593.7	1,566.8	1,555.4	5.9	6.1	-145.46	-75.6	-153.7	256.8	245.6	11.13	23.063	
1,700.0	1,693.1	1,663.8	1,651.0	6.3	6.5	-145.18	-81.1	-169.2	281.1	269.3	11.88	23.659	
1,800.0	1,792.4	1,760.8	1,746.6	6.7	7.0	-144.94	-86.5	-184.7	305.5	292.9	12.63	24.182	
1,900.0	1,891.7	1,857.8	1,842.2	7.1	7.4	-144.73	-92.0	-200.1	329.8	316.5	13.38	24.645	
2,000.0	1,991.1	1,954.8	1,937.8	7.5	7.9	-144.56	-97.5	-215.6	354.2	340.1	14.14	25.056	
2,100.0	2,090.4	2,051.7	2,033.3	7.9	8.4	-144.41	-103.0	-231.0	378.6	363.7	14.89	25.425	
2,200.0	2,189.7	2,148.7	2,128.9	8.4	8.8	-144.27	-108.4	-246.5	402.9	387.3	15.64	25.757	
2,300.0	2,289.0	2,245.7	2,224.5	8.8	9.3	-144.15	-113.9	-262.0	427.3	410.9	16.40	26.057	
2,400.0	2,388.4	2,342.7	2,320.1	9.2	9.7	-144.04	-119.4	-277.4	451.7	434.5	17.15	26.330	
2,500.0	2,487.7	2,439.7	2,415.7	9.6	10.2	-143.95	-124.9	-292.9	476.1	458.2	17.91	26.580	
2,600.0	2,587.0	2,536.6	2,511.3	10.0	10.7	-143.86	-130.4	-308.3	500.4	481.8	18.67	26.808	
2,700.0	2,686.3	2,633.6	2,606.9	10.4	11.1	-143.78	-135.8	-323.8	524.8	505.4	19.42	27.019	
2,800.0	2,785.7	2,730.6	2,702.4	10.8	11.6	-143.71	-141.3	-339.2	549.2	529.0	20.18	27.213	
2,900.0	2,885.0	2,827.6	2,798.0	11.3	12.1	-143.65	-146.8	-354.7	573.6	552.6	20.94	27.392	
3,000.0	2,984.3	2,924.6	2,893.6	11.7	12.5	-143.59	-152.3	-370.2	597.9	576.3	21.70	27.559	
3,100.0	3,083.6	3,021.6	2,989.2	12.1	13.0	-143.53	-157.7	-385.6	622.3	599.9	22.46	27.714	
3,200.0	3,183.0	3,118.5	3,084.8	12.5	13.5	-143.48	-163.2	-401.1	646.7	623.5	23.21	27.859	
3,300.0	3,282.3	3,215.5	3,180.4	12.9	13.9	-143.43	-168.7	-416.5	671.1	647.1	23.97	27.994	
3,400.0	3,381.6	3,312.5	3,275.9	13.3	14.4	-143.39	-174.2	-432.0	695.5	670.7	24.73	28.121	
3,500.0	3,480.9	3,409.5	3,371.5	13.7	14.9	-143.35	-179.6	-447.4	719.8	694.4	25.49	28.240	
3,600.0	3,580.3	3,506.5	3,467.1	14.2	15.3	-143.31	-185.1	-462.9	744.2	718.0	26.25	28.352	
3,700.0	3,679.6	3,603.4	3,562.7	14.6	15.8	-143.27	-190.6	-478.4	768.6	741.6	27.01	28.457	
3,800.0	3,778.9	3,700.4	3,658.3	15.0	16.3	-143.24	-196.1	-493.8	793.0	765.2	27.77	28.557	
3,900.0	3,878.3	3,797.4	3,753.9	15.4	16.7	-143.21	-201.6	-509.3	817.4	788.8	28.53	28.651	
4,000.0	3,977.6	3,894.4	3,849.5	15.8	17.2	-143.18	-207.0	-524.7	841.8	812.5	29.29	28.740	
4,100.0	4,076.9	3,991.4	3,945.0	16.2	17.7	-143.15	-212.5	-540.2	866.1	836.1	30.05	28.824	
4,200.0	4,176.2	4,088.3	4,040.6	16.6	18.2	-143.12	-218.0	-555.6	890.5	859.7	30.81	28.904	
4,300.0	4,275.6	4,185.3	4,136.2	17.1	18.6	-143.10	-223.5	-571.1	914.9	883.3	31.57	28.981	
4,400.0	4,374.9	4,282.3	4,231.8	17.5	19.1	-143.07	-228.9	-586.6	939.3	906.9	32.33	29.053	
4,500.0	4,474.2	4,379.3	4,327.4	17.9	19.6	-143.05	-234.4	-602.0	963.7	930.6	33.09	29.122	
4,600.0	4,573.5	4,476.3	4,423.0	18.3	20.0	-143.03	-239.9	-617.5	988.0	954.2	33.85	29.188	
4,700.0	4,672.9	4,573.3	4,518.5	18.7	20.5	-143.01	-245.4	-632.9	1,012.4	977.8	34.61	29.251	
4,800.0	4,772.2	4,670.2	4,614.1	19.1	21.0	-142.99	-250.9	-648.4	1,036.8	1,001.4	35.37	29.311	
4,900.0	4,871.5	4,767.2	4,709.7	19.6	21.4	-142.97	-256.3	-663.9	1,061.2	1,025.1	36.13	29.368	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
 Project: Blanco Wash Unit
 Reference Site: I24A 2409
 Site Error: 0.0 usft
 Reference Well: # 402H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 402H
 TVD Reference: RKB @ 6906.0usft (RIG)
 MD Reference: RKB @ 6906.0usft (RIG)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design I24A 2409 - # 403H - Original drilling - APD													Offset Site Error: 0.0 usft	
Survey Program: 0-MWD+IGRF													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,968.3	4,939.4	4,833.5	4,775.0	19.8	21.8	-142.96	-260.1	-674.4	1,077.8	1,041.2	36.65	29.406		
5,000.0	4,970.8	4,864.2	4,805.3	20.0	21.9	-127.10	-261.8	-679.3	1,085.6	1,048.7	36.90	29.419		
5,050.0	5,019.9	4,912.5	4,852.9	20.2	22.1	-113.55	-264.5	-687.0	1,097.7	1,060.4	37.31	29.422		
5,100.0	5,068.3	4,960.3	4,900.0	20.4	22.4	-106.37	-267.2	-694.6	1,109.8	1,072.0	37.74	29.405		
5,150.0	5,115.6	5,007.4	4,946.4	20.7	22.6	-102.03	-269.9	-702.1	1,121.8	1,083.6	38.19	29.370		
5,200.0	5,161.6	5,055.9	4,994.2	21.0	22.8	-99.21	-272.2	-710.3	1,133.7	1,095.0	38.69	29.301		
5,250.0	5,205.9	5,107.0	5,044.0	21.3	23.1	-97.21	-271.9	-721.5	1,145.4	1,106.2	39.25	29.179		
5,300.0	5,248.2	5,159.7	5,094.6	21.6	23.4	-95.71	-268.5	-735.9	1,156.9	1,117.0	39.88	29.009		
5,350.0	5,288.5	5,214.1	5,145.6	22.0	23.7	-94.55	-261.8	-753.7	1,168.1	1,127.5	40.58	28.786		
5,400.0	5,326.2	5,270.4	5,196.5	22.3	24.1	-93.65	-251.4	-775.2	1,178.8	1,137.4	41.35	28.508		
5,450.0	5,361.4	5,328.7	5,247.0	22.8	24.5	-92.94	-237.1	-800.4	1,188.9	1,146.7	42.20	28.172		
5,500.0	5,393.6	5,389.0	5,296.4	23.2	24.9	-92.38	-218.5	-829.6	1,198.5	1,155.3	43.15	27.774		
5,550.0	5,422.8	5,451.5	5,344.0	23.7	25.4	-91.95	-195.4	-862.9	1,207.3	1,163.1	44.20	27.313		
5,600.0	5,448.7	5,516.1	5,388.9	24.2	25.9	-91.62	-167.7	-900.2	1,215.3	1,170.0	45.38	26.781		
5,650.0	5,471.3	5,583.0	5,430.3	24.8	26.5	-91.37	-135.3	-941.4	1,222.5	1,175.8	46.69	26.185		
5,700.0	5,490.2	5,651.9	5,467.0	25.4	27.2	-91.20	-98.2	-986.3	1,228.6	1,180.5	48.12	25.532		
5,750.0	5,505.5	5,722.6	5,498.1	26.1	28.0	-91.08	-56.6	-1,034.3	1,233.7	1,183.9	49.73	24.809		
5,800.0	5,517.0	5,794.9	5,522.4	26.8	28.9	-91.00	-11.0	-1,084.9	1,237.5	1,186.1	51.41	24.074		
5,850.0	5,524.7	5,868.5	5,539.3	27.5	29.8	-90.95	37.9	-1,137.1	1,240.2	1,187.0	53.25	23.292		
5,900.0	5,528.6	5,942.8	5,547.9	28.3	30.8	-90.93	89.3	-1,190.0	1,241.6	1,186.4	55.18	22.501		
5,923.8	5,529.0	5,978.4	5,549.0	28.6	31.4	-90.92	114.4	-1,215.1	1,241.8	1,185.7	56.13	22.126		
6,000.0	5,529.0	6,055.3	5,549.0	29.9	32.5	-90.92	169.0	-1,269.3	1,242.0	1,183.3	58.74	21.145		
6,100.0	5,529.0	6,155.3	5,549.0	31.6	34.1	-90.92	240.0	-1,339.7	1,242.2	1,179.9	62.35	19.925		
6,200.0	5,529.0	6,255.3	5,549.0	33.4	35.9	-90.92	311.0	-1,410.1	1,242.5	1,176.4	66.13	18.788		
6,300.0	5,529.0	6,355.3	5,549.0	35.3	37.7	-90.92	382.0	-1,480.6	1,242.7	1,172.7	70.06	17.737		
6,400.0	5,529.0	6,455.3	5,549.0	37.3	39.6	-90.92	453.0	-1,551.0	1,243.0	1,168.8	74.12	16.768		
6,500.0	5,529.0	6,555.3	5,549.0	39.4	41.5	-90.92	524.0	-1,621.4	1,243.2	1,164.9	78.29	15.879		
6,600.0	5,529.0	6,655.3	5,549.0	41.4	43.5	-90.92	595.0	-1,691.9	1,243.4	1,160.9	82.55	15.063		
6,700.0	5,529.0	6,755.3	5,549.0	43.6	45.6	-90.92	666.0	-1,762.3	1,243.7	1,156.8	86.88	14.314		
6,800.0	5,529.0	6,855.3	5,549.0	45.7	47.7	-90.92	737.0	-1,832.7	1,243.9	1,152.6	91.28	13.627		
6,900.0	5,529.0	6,955.3	5,549.0	47.9	49.9	-90.92	807.9	-1,903.2	1,244.1	1,148.4	95.74	12.995		
7,000.0	5,529.0	7,055.3	5,549.0	50.2	52.0	-90.92	878.9	-1,973.6	1,244.4	1,144.1	100.25	12.413		
7,100.0	5,529.0	7,155.3	5,549.0	52.4	54.2	-90.92	949.9	-2,044.0	1,244.6	1,139.8	104.80	11.876		
7,200.0	5,529.0	7,255.3	5,549.0	54.7	56.5	-90.92	1,020.9	-2,114.4	1,244.8	1,135.5	109.38	11.380		
7,300.0	5,529.0	7,355.3	5,549.0	57.0	58.7	-90.92	1,091.9	-2,184.9	1,245.1	1,131.1	114.00	10.921		
7,400.0	5,529.0	7,455.3	5,549.0	59.3	61.0	-90.92	1,162.9	-2,255.3	1,245.3	1,126.7	118.65	10.495		
7,500.0	5,529.0	7,555.3	5,549.0	61.6	63.3	-90.92	1,233.9	-2,325.7	1,245.6	1,122.2	123.33	10.099		
7,600.0	5,529.0	7,655.3	5,549.0	64.0	65.6	-90.92	1,304.9	-2,396.2	1,245.8	1,117.8	128.03	9.730		
7,700.0	5,529.0	7,755.3	5,549.0	66.3	67.9	-90.92	1,375.9	-2,466.6	1,246.0	1,113.3	132.75	9.386		
7,800.0	5,529.0	7,855.3	5,549.0	68.7	70.2	-90.92	1,446.9	-2,537.0	1,246.3	1,108.8	137.49	9.065		
7,900.0	5,529.0	7,955.3	5,549.0	71.0	72.6	-90.92	1,517.9	-2,607.4	1,246.5	1,104.3	142.24	8.763		
8,000.0	5,529.0	8,055.3	5,549.0	73.4	74.9	-90.92	1,588.8	-2,677.9	1,246.7	1,099.7	147.01	8.480		
8,100.0	5,529.0	8,155.3	5,549.0	75.8	77.3	-90.92	1,659.8	-2,748.3	1,247.0	1,095.2	151.80	8.215		
8,200.0	5,529.0	8,255.3	5,549.0	78.2	79.7	-90.92	1,730.8	-2,818.7	1,247.2	1,090.6	156.59	7.965		
8,300.0	5,529.0	8,355.3	5,549.0	80.6	82.0	-90.92	1,801.8	-2,889.2	1,247.4	1,086.0	161.40	7.729		
8,400.0	5,529.0	8,455.3	5,549.0	83.0	84.4	-90.92	1,872.8	-2,959.6	1,247.7	1,081.5	166.22	7.506		
8,500.0	5,529.0	8,555.3	5,549.0	85.4	86.8	-90.92	1,943.8	-3,030.0	1,247.9	1,076.9	171.04	7.296		
8,600.0	5,529.0	8,655.3	5,549.0	87.8	89.2	-90.92	2,014.8	-3,100.4	1,248.2	1,072.3	175.88	7.097		
8,700.0	5,529.0	8,755.3	5,549.0	90.2	91.6	-90.92	2,085.8	-3,170.9	1,248.4	1,067.7	180.72	6.908		
8,800.0	5,529.0	8,855.3	5,549.0	92.6	94.0	-90.92	2,156.8	-3,241.3	1,248.6	1,063.1	185.57	6.728		
8,900.0	5,529.0	8,955.3	5,549.0	95.0	96.4	-90.92	2,227.8	-3,311.7	1,248.9	1,058.4	190.43	6.558		
9,000.0	5,529.0	9,055.3	5,549.0	97.4	98.8	-90.92	2,298.8	-3,382.2	1,249.1	1,053.8	195.29	6.396		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
 Project: Blanco Wash Unit
 Reference Site: I24A 2409
 Site Error: 0.0 usft
 Reference Well: # 402H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 402H
 TVD Reference: RKB @ 6906.0usft (RIG)
 MD Reference: RKB @ 6906.0usft (RIG)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design I24A 2409 - # 403H - Original drilling - APD													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+IGRF													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,100.0	5,529.0	9,155.3	5,549.0	99.9	101.2	-90.92	2,369.7	-3,452.6	1,249.3	1,049.2	200.16	6.242	
9,200.0	5,529.0	9,255.3	5,549.0	102.3	103.7	-90.92	2,440.7	-3,523.0	1,249.6	1,044.5	205.04	6.094	
9,300.0	5,529.0	9,355.3	5,549.0	104.7	106.1	-90.92	2,511.7	-3,593.4	1,249.8	1,039.9	209.92	5.954	
9,400.0	5,529.0	9,455.3	5,549.0	107.2	108.5	-90.92	2,582.7	-3,663.9	1,250.0	1,035.2	214.80	5.819	
9,500.0	5,529.0	9,555.3	5,549.0	109.6	110.9	-90.92	2,653.7	-3,734.3	1,250.3	1,030.6	219.69	5.691	
9,600.0	5,529.0	9,655.3	5,549.0	112.1	113.4	-90.92	2,724.7	-3,804.7	1,250.5	1,025.9	224.59	5.568	
9,700.0	5,529.0	9,755.3	5,549.0	114.5	115.8	-90.92	2,795.7	-3,875.2	1,250.8	1,021.3	229.48	5.450	
9,800.0	5,529.0	9,855.2	5,549.0	117.0	118.3	-90.92	2,866.7	-3,945.6	1,251.0	1,016.6	234.38	5.337	
9,900.0	5,529.0	9,955.2	5,549.0	119.4	120.7	-90.92	2,937.7	-4,016.0	1,251.2	1,011.9	239.29	5.229	
10,000.0	5,529.0	10,055.2	5,549.0	121.8	123.1	-90.92	3,008.7	-4,086.4	1,251.5	1,007.3	244.20	5.125	
10,100.0	5,529.0	10,155.2	5,549.0	124.3	125.6	-90.92	3,079.7	-4,156.9	1,251.7	1,002.6	249.11	5.025	
10,200.0	5,529.0	10,255.2	5,549.0	126.8	128.0	-90.92	3,150.6	-4,227.3	1,251.9	997.9	254.02	4.928	
10,300.0	5,529.0	10,355.2	5,549.0	129.2	130.5	-90.92	3,221.6	-4,297.7	1,252.2	993.2	258.93	4.836	
10,400.0	5,529.0	10,455.2	5,549.0	131.7	132.9	-90.92	3,292.6	-4,368.2	1,252.4	988.6	263.85	4.747	
10,500.0	5,529.0	10,555.2	5,549.0	134.1	135.4	-90.91	3,363.6	-4,438.6	1,252.6	983.9	268.77	4.661	
10,600.0	5,529.0	10,655.2	5,549.0	136.6	137.8	-90.91	3,434.6	-4,509.0	1,252.9	979.2	273.70	4.578	
10,700.0	5,529.0	10,755.2	5,549.0	139.0	140.3	-90.91	3,505.6	-4,579.5	1,253.1	974.5	278.62	4.498	
10,800.0	5,529.0	10,855.2	5,549.0	141.5	142.7	-90.91	3,576.6	-4,649.9	1,253.3	969.8	283.55	4.420	
10,900.0	5,529.0	10,955.2	5,549.0	144.0	145.2	-90.91	3,647.6	-4,720.3	1,253.6	965.1	288.48	4.346	
11,000.0	5,529.0	11,055.2	5,549.0	146.4	147.7	-90.91	3,718.6	-4,790.7	1,253.8	960.4	293.41	4.273	
11,100.0	5,529.0	11,155.2	5,549.0	148.9	150.1	-90.91	3,789.6	-4,861.2	1,254.1	955.7	298.34	4.203	
11,200.0	5,529.0	11,255.2	5,549.0	151.3	152.6	-90.91	3,860.6	-4,931.6	1,254.3	951.0	303.27	4.136	
11,300.0	5,529.0	11,355.2	5,549.0	153.8	155.0	-90.91	3,931.5	-5,002.0	1,254.5	946.3	308.21	4.070	
11,400.0	5,529.0	11,455.2	5,549.0	156.3	157.5	-90.91	4,002.5	-5,072.5	1,254.8	941.6	313.15	4.007	
11,500.0	5,529.0	11,555.2	5,549.0	158.7	160.0	-90.91	4,073.5	-5,142.9	1,255.0	936.9	318.08	3.946	
11,600.0	5,529.0	11,655.2	5,549.0	161.2	162.4	-90.91	4,144.5	-5,213.3	1,255.2	932.2	323.02	3.886	
11,700.0	5,529.0	11,755.2	5,549.0	163.7	164.9	-90.91	4,215.5	-5,283.7	1,255.5	927.5	327.96	3.828	
11,800.0	5,529.0	11,855.2	5,549.0	166.1	167.4	-90.91	4,286.5	-5,354.2	1,255.7	922.8	332.91	3.772	
11,900.0	5,529.0	11,955.2	5,549.0	168.6	169.8	-90.91	4,357.5	-5,424.6	1,255.9	918.1	337.85	3.717	
12,000.0	5,529.0	12,055.2	5,549.0	171.1	172.3	-90.91	4,428.5	-5,495.0	1,256.2	913.4	342.79	3.665	
12,100.0	5,529.0	12,155.2	5,549.0	173.6	174.8	-90.91	4,499.5	-5,565.5	1,256.4	908.7	347.74	3.613	
12,200.0	5,529.0	12,255.2	5,549.0	176.0	177.2	-90.91	4,570.5	-5,635.9	1,256.7	904.0	352.69	3.563	
12,300.0	5,529.0	12,355.2	5,549.0	178.5	179.7	-90.91	4,641.5	-5,706.3	1,256.9	899.3	357.63	3.514	
12,400.0	5,529.0	12,455.2	5,549.0	181.0	182.2	-90.91	4,712.4	-5,776.7	1,257.1	894.5	362.58	3.467	
12,500.0	5,529.0	12,555.2	5,549.0	183.4	184.6	-90.91	4,783.4	-5,847.2	1,257.4	889.8	367.53	3.421	
12,600.0	5,529.0	12,655.2	5,549.0	185.9	187.1	-90.91	4,854.4	-5,917.6	1,257.6	885.1	372.48	3.376	
12,700.0	5,529.0	12,755.2	5,549.0	188.4	189.6	-90.91	4,925.4	-5,988.0	1,257.8	880.4	377.43	3.333	
12,800.0	5,529.0	12,855.2	5,549.0	190.9	192.0	-90.91	4,996.4	-6,058.5	1,258.1	875.7	382.39	3.290	
12,900.0	5,529.0	12,955.2	5,549.0	193.3	194.5	-90.91	5,067.4	-6,128.9	1,258.3	871.0	387.34	3.249	
13,000.0	5,529.0	13,055.2	5,549.0	195.8	197.0	-90.91	5,138.4	-6,199.3	1,258.5	866.3	392.29	3.208	
13,100.0	5,529.0	13,155.2	5,549.0	198.3	199.5	-90.91	5,209.4	-6,269.7	1,258.8	861.5	397.25	3.169	
13,200.0	5,529.0	13,255.2	5,549.0	200.8	201.9	-90.91	5,280.4	-6,340.2	1,259.0	856.8	402.20	3.130	
13,300.0	5,529.0	13,355.2	5,549.0	203.2	204.4	-90.91	5,351.4	-6,410.6	1,259.3	852.1	407.16	3.093	
13,400.0	5,529.0	13,455.2	5,549.0	205.7	206.9	-90.91	5,422.4	-6,481.0	1,259.5	847.4	412.11	3.056	
13,500.0	5,529.0	13,555.2	5,549.0	208.2	209.4	-90.91	5,493.3	-6,551.5	1,259.7	842.7	417.07	3.020	
13,600.0	5,529.0	13,655.2	5,549.0	210.7	211.8	-90.91	5,564.3	-6,621.9	1,260.0	837.9	422.03	2.986	
13,700.0	5,529.0	13,755.2	5,549.0	213.1	214.3	-90.91	5,635.3	-6,692.3	1,260.2	833.2	426.98	2.951	
13,800.0	5,529.0	13,855.2	5,549.0	215.6	216.8	-90.91	5,706.3	-6,762.7	1,260.4	828.5	431.94	2.918	
13,900.0	5,529.0	13,955.2	5,549.0	218.1	219.3	-90.91	5,777.3	-6,833.2	1,260.7	823.8	436.90	2.885	
14,000.0	5,529.0	14,055.2	5,549.0	220.6	221.7	-90.91	5,848.3	-6,903.6	1,260.9	819.0	441.86	2.854	
14,100.0	5,529.0	14,155.2	5,549.0	223.1	224.2	-90.91	5,919.3	-6,974.0	1,261.1	814.3	446.82	2.822	
14,200.0	5,529.0	14,255.2	5,549.0	225.5	226.7	-90.91	5,990.3	-7,044.5	1,261.4	809.6	451.78	2.792	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
 Project: Blanco Wash Unit
 Reference Site: I24A 2409
 Site Error: 0.0 usft
 Reference Well: # 402H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 402H
 TVD Reference: RKB @ 6906.0usft (RIG)
 MD Reference: RKB @ 6906.0usft (RIG)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design I24A 2409 - # 403H - Original drilling - APD													Offset Site Error: 0.0 usft
Survey Program: 0-MWD+IGRF													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
14,300.0	5,529.0	14,355.2	5,549.0	228.0	229.2	-90.91	6,061.3	-7,114.9	1,261.6	804.9	456.74	2.762	
14,400.0	5,529.0	14,455.2	5,549.0	230.5	231.7	-90.91	6,132.3	-7,185.3	1,261.9	800.2	461.70	2.733	
14,500.0	5,529.0	14,555.2	5,549.0	233.0	234.1	-90.91	6,203.3	-7,255.8	1,262.1	795.4	466.67	2.704	
14,600.0	5,529.0	14,655.2	5,549.0	235.5	236.6	-90.91	6,274.2	-7,326.2	1,262.3	790.7	471.63	2.677	
14,700.0	5,529.0	14,755.2	5,549.0	237.9	239.1	-90.91	6,345.2	-7,396.6	1,262.6	786.0	476.59	2.649	
14,800.0	5,529.0	14,855.2	5,549.0	240.4	241.6	-90.91	6,416.2	-7,467.0	1,262.8	781.2	481.56	2.622	
14,900.0	5,529.0	14,955.2	5,549.0	242.9	244.1	-90.91	6,487.2	-7,537.5	1,263.0	776.5	486.52	2.596	
15,000.0	5,529.0	15,055.2	5,549.0	245.4	246.5	-90.91	6,558.2	-7,607.9	1,263.3	771.8	491.48	2.570	
15,100.0	5,529.0	15,155.2	5,549.0	247.9	249.0	-90.91	6,629.2	-7,678.3	1,263.5	767.1	496.45	2.545	
15,200.0	5,529.0	15,255.2	5,549.0	250.3	251.5	-90.91	6,700.2	-7,748.8	1,263.7	762.3	501.41	2.520	
15,300.0	5,529.0	15,355.2	5,549.0	252.8	254.0	-90.91	6,771.2	-7,819.2	1,264.0	757.6	506.38	2.496	
15,400.0	5,529.0	15,455.2	5,549.0	255.3	256.5	-90.91	6,842.2	-7,889.6	1,264.2	752.9	511.34	2.472	
15,500.0	5,529.0	15,555.2	5,549.0	257.8	258.9	-90.91	6,913.2	-7,960.0	1,264.5	748.1	516.31	2.449	
15,600.0	5,529.0	15,655.2	5,549.0	260.3	261.4	-90.91	6,984.2	-8,030.5	1,264.7	743.4	521.27	2.426	
15,700.0	5,529.0	15,755.2	5,549.0	262.7	263.9	-90.91	7,055.1	-8,100.9	1,264.9	738.7	526.24	2.404	
15,800.0	5,529.0	15,855.2	5,549.0	265.2	266.4	-90.91	7,126.1	-8,171.3	1,265.2	734.0	531.21	2.382	
15,900.0	5,529.0	15,955.2	5,549.0	267.7	268.9	-90.91	7,197.1	-8,241.8	1,265.4	729.2	536.17	2.360	
16,000.0	5,529.0	16,055.2	5,549.0	270.2	271.3	-90.91	7,268.1	-8,312.2	1,265.6	724.5	541.14	2.339	
16,100.0	5,529.0	16,155.2	5,549.0	272.7	273.8	-90.91	7,339.1	-8,382.6	1,265.9	719.8	546.11	2.318	
16,200.0	5,529.0	16,255.2	5,549.0	275.2	276.3	-90.91	7,410.1	-8,453.0	1,266.1	715.0	551.08	2.298	
16,300.0	5,529.0	16,355.2	5,549.0	277.6	278.8	-90.90	7,481.1	-8,523.5	1,266.3	710.3	556.04	2.277	
16,400.0	5,529.0	16,455.2	5,549.0	280.1	281.3	-90.90	7,552.1	-8,593.9	1,266.6	705.6	561.01	2.258	
16,500.0	5,529.0	16,555.2	5,549.0	282.6	283.8	-90.90	7,623.1	-8,664.3	1,266.8	700.8	565.98	2.238	
16,600.0	5,529.0	16,655.2	5,549.0	285.1	286.2	-90.90	7,694.1	-8,734.8	1,267.1	696.1	570.95	2.219	
16,700.0	5,529.0	16,755.2	5,549.0	287.6	288.7	-90.90	7,765.1	-8,805.2	1,267.3	691.4	575.92	2.200	
16,800.0	5,529.0	16,855.2	5,549.0	290.1	291.2	-90.90	7,836.0	-8,875.6	1,267.5	686.6	580.89	2.182	
16,900.0	5,529.0	16,955.2	5,549.0	292.5	293.7	-90.90	7,907.0	-8,946.0	1,267.8	681.9	585.86	2.164	
16,910.2	5,529.0	16,965.4	5,549.0	292.8	293.9	-90.90	7,914.3	-8,953.2	1,267.8	681.4	586.36	2.162 SF	

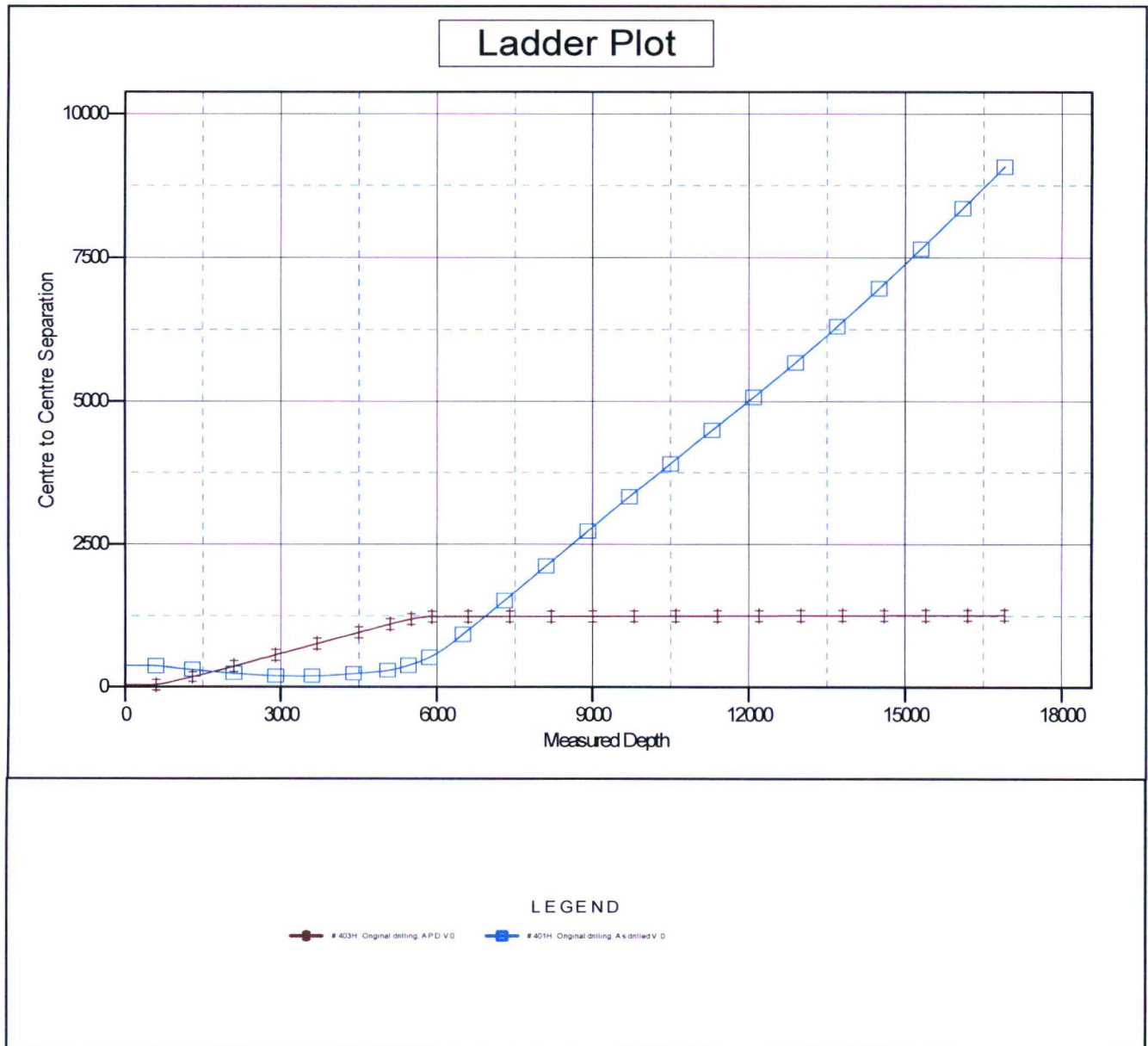
Anticollision Report

Company: DJR Operating
Project: Blanco Wash Unit
Reference Site: I24A 2409
Site Error: 0.0 usft
Reference Well: # 402H
Well Error: 0.0 usft
Reference Wellbore: Original drilling
Reference Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM
Offset TVD Reference: Offset Datum

Reference Depths are relative to RKB @ 6906.0usft (RIG)
 Offset Depths are relative to Offset Datum
 Central Meridian is 107° 50' 0.000 W

Coordinates are relative to: # 402H
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.06°



Anticollision Report

Company: DJR Operating
Project: Blanco Wash Unit
Reference Site: I24A 2409
Site Error: 0.0 usft
Reference Well: # 402H
Well Error: 0.0 usft
Reference Wellbore: Original drilling
Reference Design: APD

Local Co-ordinate Reference: Well # 402H
TVD Reference: RKB @ 6906.0usft (RIG)
MD Reference: RKB @ 6906.0usft (RIG)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM
Offset TVD Reference: Offset Datum

Reference Depths are relative to RKB @ 6906.0usft (RIG)
 Offset Depths are relative to Offset Datum
 Central Meridian is 107° 50' 0.000 W

Coordinates are relative to: # 402H
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.06°

