

Javernick Oil LLC

Fremont County, Co (Nad 27)

Sec 33 T19S-R69W

Royal Gorge #1-A

Re-Entry

UWI:

API:

Plan: #1

Mesa West Planning Report

21 August, 2014

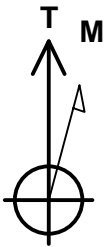


Javernick Oil LLC

Project: Fremont County, Co (Nad 27)
Site: Sec 33 T19S-R69W
Well: Royal Gorge #1-A
Wellbore: Re-Entry
Plan: #1

Reference Details - WELL CENTRE

Geodetic System: US State Plane 1927 (Exact solution)
Ellipsoid: Clarke 1866
Zone: Colorado South 503
Northing: 614640.60
Easting: 2110072.10
Latitude: 38° 21' 14.600 N
Longitude: 105° 6' 58.223 W
Grid Convergence: 0.24° West
Ground Elevation: 5417.0
KB Elevation: Est RKB @ 5428.0usft

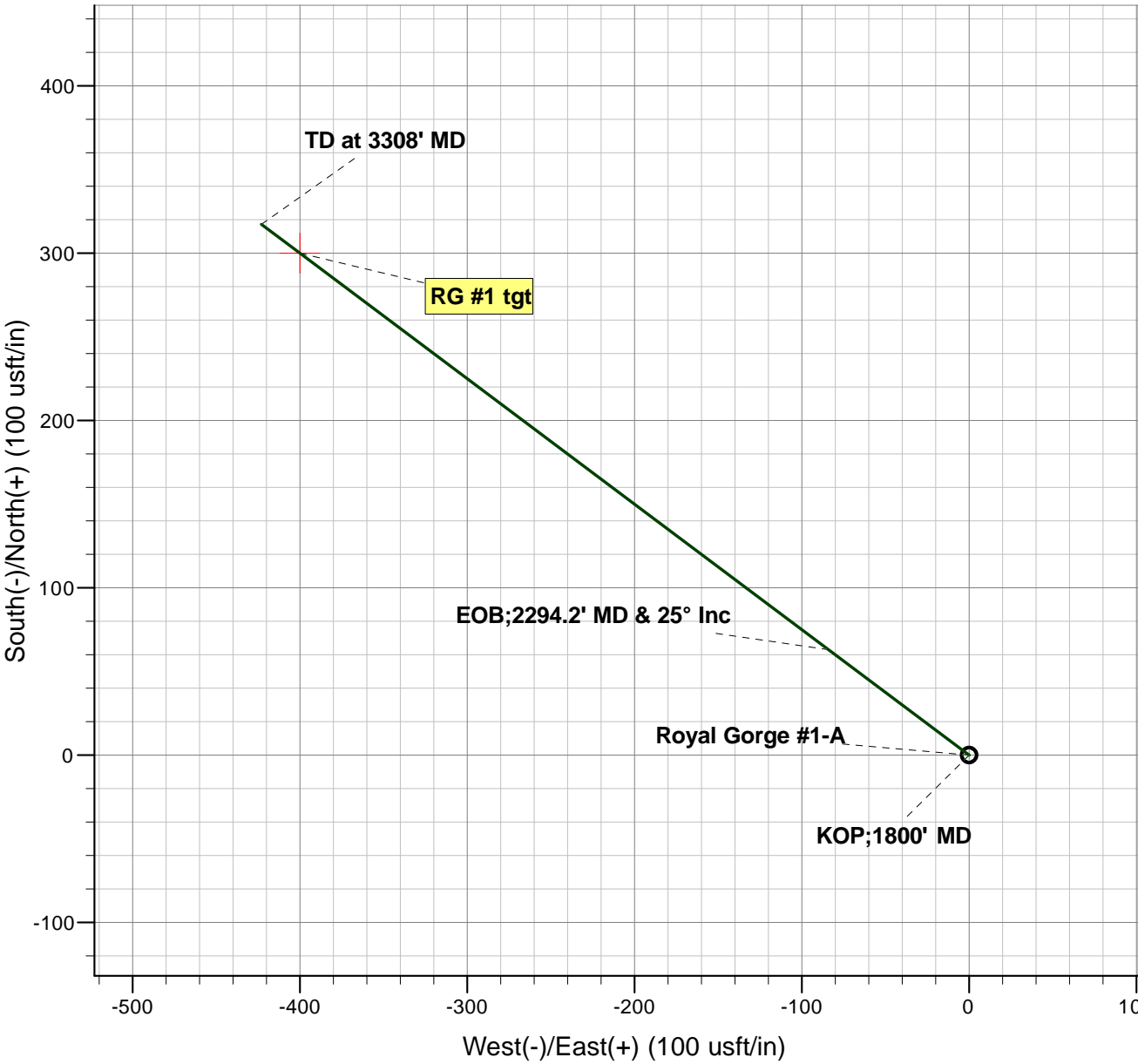
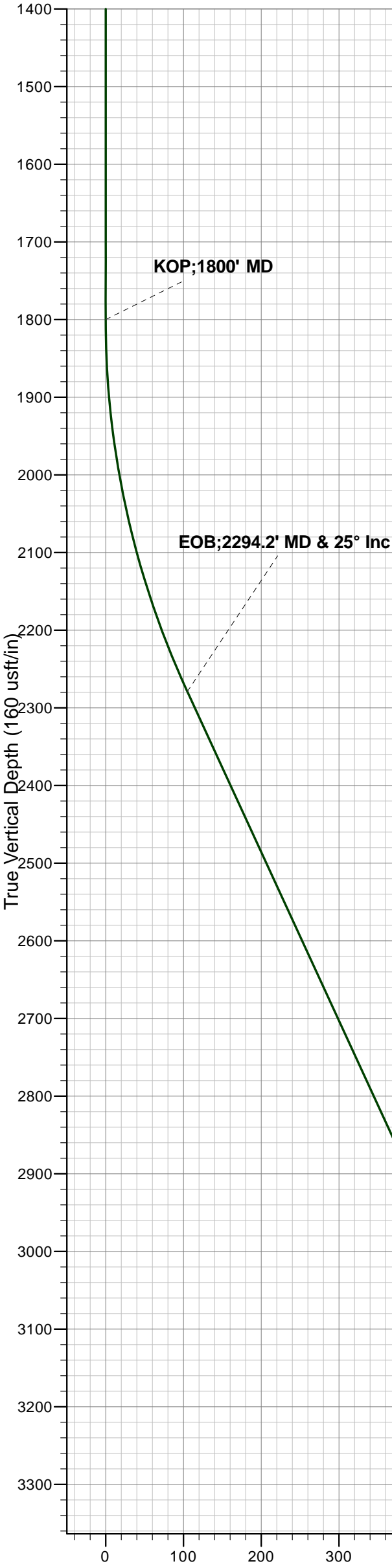


Azimuths to True North
Magnetic North: 8.47°

Magnetic Field
Strength: 51739.3snT
Dip Angle: 65.25°
Date: 24/02/2014
Model: IGRF200510

PLAN DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	RG #1 tgt
2	1800.0	0.00	0.00	1800.0	0.0	0.0	0.00	0.00	0.0	
3	2294.2	24.71	306.87	2279.0	63.0	-83.9	5.00	306.87	104.9	
4	3239.2	24.71	306.87	3137.5	300.0	-400.0	0.00	0.00	500.0	
5	3308.0	24.71	306.87	3200.0	317.3	-423.0	0.00	0.00	528.8	



ANNOTATIONS

TVD	MD	Annotation
1800.0	1800.0	KOP;1800' MD
2279.0	2294.2	EOB;2294.2' MD & 25° Inc
3200.0	3308.0	TD at 3308' MD

FORMATION TOP DETAILS

No formation data is available



Mesa West Directional

Planning Report



Database:	WellPlan Services	Local Co-ordinate Reference:	Well Royal Gorge #1-A
Company:	Javernick Oil LLC	TVD Reference:	Est RKB @ 5428.0usft
Project:	Fremont County, Co (Nad 27)	MD Reference:	Est RKB @ 5428.0usft
Site:	Sec 33 T19S-R69W	North Reference:	True
Well:	Royal Gorge #1-A	Survey Calculation Method:	Minimum Curvature
Wellbore:	Re-Entry		
Plan:	#1		

Project	Fremont County, Co (Nad 27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado South 503		

Site	Sec 33 T19S-R69W		
Site Position:		Northing:	614,640.60 usft
From:	Map	Easting:	2,110,072.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	38° 21' 14.600 N
		Longitude:	105° 6' 58.223 W
		Grid Convergence:	0.24 °

Well	Royal Gorge #1-A		
Well Position	+N/-S	0.0 usft	Northing: 614,640.60 usft
	+E/-W	0.0 usft	Easting: 2,110,072.10 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 38° 21' 14.600 N
			Longitude: 105° 6' 58.223 W
			Ground Level: 5,417.0 usft

Wellbore	Re-Entry				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	24/02/2014	8.47	65.25	51,739

Plan	#1			
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	306.87

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	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,294.2	24.71	306.87	2,279.0	63.0	-83.9	5.00	5.00	-10.75	306.87	
3,239.2	24.71	306.87	3,137.5	300.0	-400.0	0.00	0.00	0.00	0.00	RG #1 tgt
3,308.0	24.71	306.87	3,200.0	317.3	-423.0	0.00	0.00	0.00	0.00	

Mesa West Directional

Planning Report



Database:	WellPlan Services	Local Co-ordinate Reference:	Well Royal Gorge #1-A
Company:	Javernick Oil LLC	TVD Reference:	Est RKB @ 5428.0usft
Project:	Fremont County, Co (Nad 27)	MD Reference:	Est RKB @ 5428.0usft
Site:	Sec 33 T19S-R69W	North Reference:	True
Well:	Royal Gorge #1-A	Survey Calculation Method:	Minimum Curvature
Wellbore:	Re-Entry		
Plan:	#1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea (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	-5,428.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP;1800' MD										
1,800.0	0.00	0.00	1,800.0	-3,628.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	5.00	306.87	1,899.9	-3,528.1	2.6	-3.5	4.4	5.00	5.00	0.00
2,000.0	10.00	306.87	1,999.0	-3,429.0	10.4	-13.9	17.4	5.00	5.00	0.00
2,100.0	15.00	306.87	2,096.6	-3,331.4	23.4	-31.2	39.0	5.00	5.00	0.00
2,200.0	20.00	306.87	2,191.9	-3,236.1	41.5	-55.3	69.1	5.00	5.00	0.00
EOB;2294.2' MD & 25° Inc										
2,294.2	24.71	306.87	2,279.0	-3,149.0	63.0	-83.9	104.9	5.00	5.00	0.00
2,300.0	24.71	306.87	2,284.3	-3,143.7	64.4	-85.9	107.4	0.00	0.00	0.00
2,400.0	24.71	306.87	2,375.1	-3,052.9	89.5	-119.3	149.2	0.00	0.00	0.00
2,500.0	24.71	306.87	2,466.0	-2,962.0	114.6	-152.8	191.0	0.00	0.00	0.00
2,600.0	24.71	306.87	2,556.8	-2,871.2	139.7	-186.2	232.8	0.00	0.00	0.00
2,700.0	24.71	306.87	2,647.7	-2,780.3	164.7	-219.7	274.6	0.00	0.00	0.00
2,800.0	24.71	306.87	2,738.5	-2,689.5	189.8	-253.1	316.4	0.00	0.00	0.00
2,900.0	24.71	306.87	2,829.3	-2,598.7	214.9	-286.5	358.2	0.00	0.00	0.00
3,000.0	24.71	306.87	2,920.2	-2,507.8	240.0	-320.0	400.0	0.00	0.00	0.00
3,100.0	24.71	306.87	3,011.0	-2,417.0	265.1	-353.4	441.8	0.00	0.00	0.00
3,200.0	24.71	306.87	3,101.9	-2,326.1	290.2	-386.9	483.6	0.00	0.00	0.00
3,239.2	24.71	306.87	3,137.5	-2,290.5	300.0	-400.0	500.0	0.00	0.00	0.00
3,300.0	24.71	306.87	3,192.7	-2,235.3	315.2	-420.3	525.4	0.00	0.00	0.00
TD at 3308' MD										
3,308.0	24.71	306.87	3,200.0	-2,228.0	317.2	-423.0	528.7	0.00	0.00	0.00

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
RG #1 tgt	0.00	0.00	3,137.5	300.0	-400.0	614,938.96	2,109,670.87	38° 21' 17.565 N	105° 7' 3.244 W	
- hit/miss target										
- Shape										
- plan hits target center										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
1,800.0	1,800.0	0.0	0.0	KOP;1800' MD	
2,294.2	2,279.0	63.0	-83.9	EOB;2294.2' MD & 25° Inc	
3,308.0	3,200.0	317.2	-423.0	TD at 3308' MD	