


AusCo Petroleum Inc.

Site: Bird 13-18*
Well: Bird 13-18
Wellbore: DD
Plan: Option #1**

Reference Details - WELL CENTRE

Geodetic System: US State Plane 1983
Ellipsoid: GRS 1980
Zone: Colorado Central Zone
Northing: 1172405.19
Easting: 3097531.42
Latitude: 38° 18' 22.36 N
Longitude: 105° 9' 36.48 W
Grid Convergence: 0.21° West
Ground Elevation: 6070.0
KB Elevation: RKB @ 6075.0usft (kb;5')

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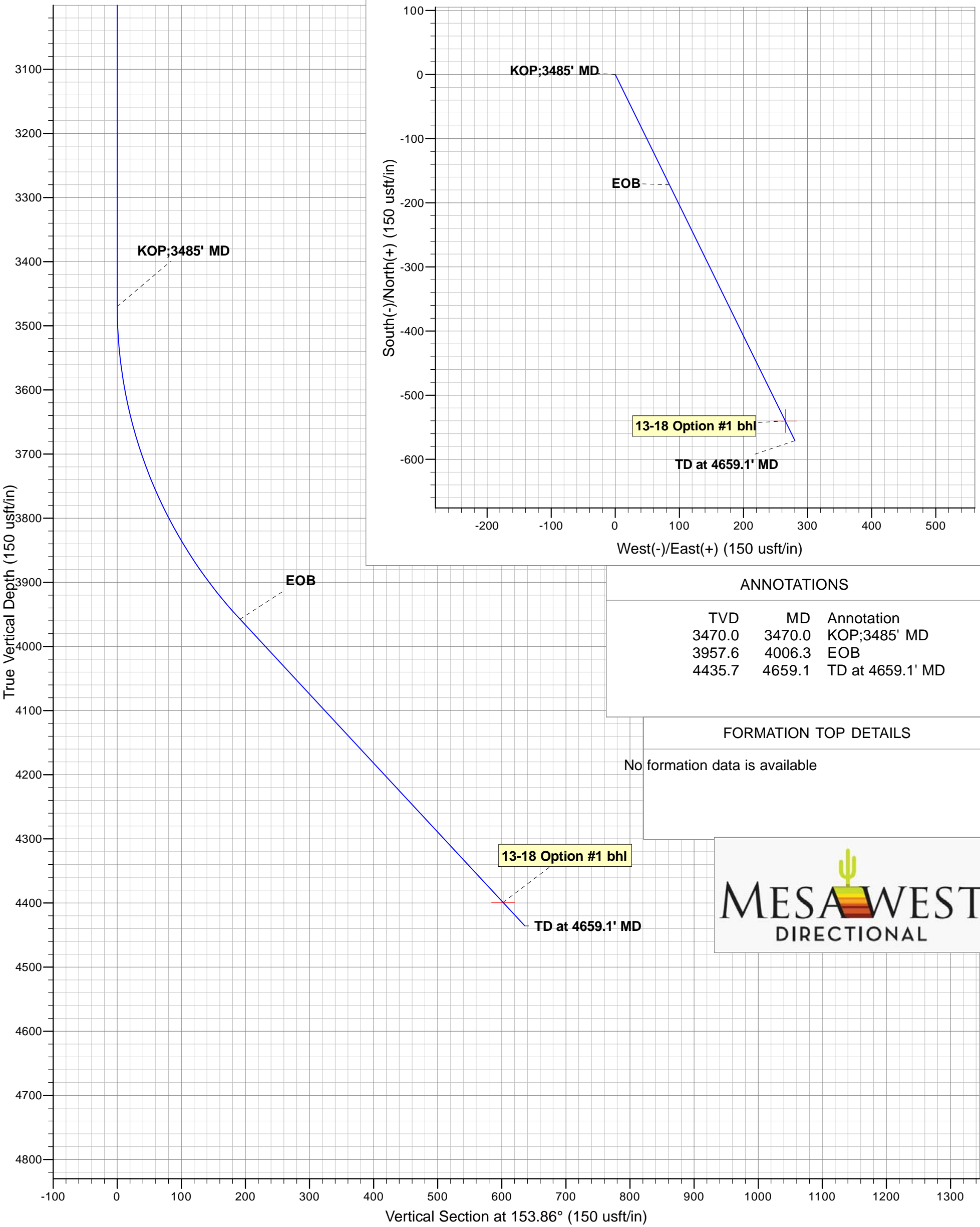


Azimuths to Grid North
True North: -0.21°
Magnetic North: 7.86°

Magnetic Field
Strength: 51313.4snT
Dip Angle: 65.07°
Date: 04/08/2017
Model: IGRF201015

PLAN DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
3470.0	0.00	0.00	3470.0	0.0	0.0	0.00	0.00	0.0	
4006.3	42.90	153.86	3957.6	-172.0	84.4	8.00	153.86	191.6	
4609.1	42.90	153.86	4399.1	-540.4	265.2	0.00	0.00	601.9	13-18 Option #1 bhl
4659.1	42.90	153.86	4435.7	-570.9	280.2	0.00	0.00	636.0	



Database:	WellPlan Services	Local Co-ordinate Reference:	Well Bird 13-18
Company:	AusCo Petroleum Inc.	TVD Reference:	RKB @ 6075.0usft (kb;5')
Project:	Fremont County (Nad 83)	MD Reference:	RKB @ 6075.0usft (kb;5')
Site:	Bird 13-18*	North Reference:	Grid
Well:	Bird 13-18	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Plan:	Option #1**		

Project	Fremont County (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Bird 13-18*			
Site Position:		Northing:	1,172,433.55 usft	Latitude: 38° 18' 22.64 N
From:	Lat/Long	Easting:	3,097,527.97 usft	Longitude: 105° 9' 36.52 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.21 °

Well	Bird 13-18			
Well Position	+N/-S	-28.4 usft	Northing:	1,172,405.18 usft
	+E/-W	3.5 usft	Easting:	3,097,531.42 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 6,070.0 usft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF201015	04/08/2017	8.07	65.07	51,313

Plan	Option #1**			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	-15.0	0.0	0.0	153.86

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	
3,470.0	0.00	0.00	3,470.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,006.3	42.90	153.86	3,957.6	-172.0	84.4	8.00	8.00	0.00	153.86	
4,609.1	42.90	153.86	4,399.1	-540.4	265.2	0.00	0.00	0.00	0.00	13-18 Option #1 bhl
4,659.1	42.90	153.86	4,435.7	-570.9	280.2	0.00	0.00	0.00	0.00	