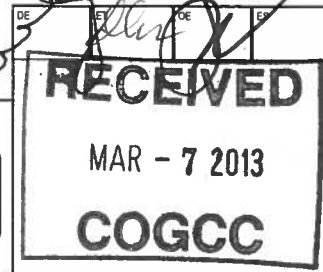




02165741

Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: 100185	4. Contact Name: Bonnie Lamond	Complete the Attachment Checklist OP OGCC
2. Name of Operator: Encana Oil & Gas (USA) Inc.	Phone: 720.876.5156	
3. Address: 370 17th Street Suite 1700 City: Denver State: CO Zip 80202	Fax: 720.876.6177	
5. API Number 05-045-21807	OGCC Facility ID Number 335058	Survey Plat X 2165742
6. Well/Facility Name: ALP Fee	7. Well/Facility Number 24-2CC (J24NW)	Directional Survey X 2165743
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): NWSE Sec 24, T6S, R93W 6 P.M.		Surface Eqpm Diagram
9. County: Garfield	10. Field Name: Parachute	Technical Info Page X X
11. Federal, Indian or State Lease Number: COC056608A		Other

General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FNL/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> <input type="checkbox"/>
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer	attach directional survey
Latitude	Distance to nearest property line
Longitude	Distance to nearest bldg, public rd, utility or RR
Ground Elevation	Distance to nearest lease line
	Is location in a High Density Area (rule 603b)? Yes/No NO
	Distance to nearest well same formation
	Surface owner consultation date:
GPS DATA: Date of Measurement PDOP Reading Instrument Operator's Name	
<input type="checkbox"/> CHANGE SPACING UNIT Formation Formation Code Spacing order number Unit Acreage Unit configuration	<input type="checkbox"/> Remove from surface bond Signed surface use agreement attached
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling): Effective Date: Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	<input checked="" type="checkbox"/> CHANGE WELL NAME From: ALP Fee 24-2CC (J24NW) To: ALP Fee 24-2C (J24NW) Effective Date: 03/05/13
<input type="checkbox"/> ABANDONED LOCATION: Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No Date Ready for Inspection:	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS Date well shut in or temporarily abandoned: Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No MIT required if shut in longer than two years. Date of last MIT
<input type="checkbox"/> SPUD DATE:	<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK Method used Cementing tool setting/perf depth Cement volume Cement top Cement bottom Date	
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004. Final reclamation will commence on approximately Final reclamation is completed and site is ready for inspection.	

Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent Approximate Start Date:	<input type="checkbox"/> Report of Work Done Date Work Completed:	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)		
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input checked="" type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans
<input checked="" type="checkbox"/> Casing/Cementing Program Change	<input type="checkbox"/> Other:	for Spills and Releases

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Bonnie Lamond Date: 3/5/2013 Email: bonnie.lamond@encana.com
Print Name: Bonnie Lamond Title: Permitting Technician

COGCC Approved: [Signature] Title: NWAE Date: 3/21/13
CONDITIONS OF APPROVAL, IF ANY:

TECHNICAL INFORMATION PAGE



1. OGCC Operator Number:	100185	API Number:	0 05-045-21807
2. Name of Operator:	Encana Oil & Gas (USA) Inc.	OGCC Facility ID #	335058
3. Well/Facility Name:	ALP Fee	Well/Facility Number:	24-2CC (J24NW)
4. Location (QtrQtr, Sec, Twp, Rng, Meridian):	NWSE Sec 24, T6S, R93W 6 P.M.		

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS

Encana Oil & Gas (USA) Inc. requests permission to change surface and production casing programs on the above referenced well.

Will be a tapered hole. Surface casing will go from 0-200' with a hole size of 14-3/4" and casing size of 9-5/8". Surface casing will continue from 200'- 1078' with a hole size of 12-1/4" and casing size of 9-5/8" Cement volume for surface casing will increase from 354 sk to 411 sk. Production casing will change from 0-8269' with a hole size of 7-7/8" and casing size of 4-1/2" to a tapered program. Production casing will go from 0-6151' with hole size of 8-3/4" and casing size of 4-1/2". And continue on from 6151'- 8247' with a hole size of 7-7/8" and casing size of 4-1/2", thus reducing the TD from 8269' to 8247'



02165742

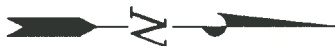
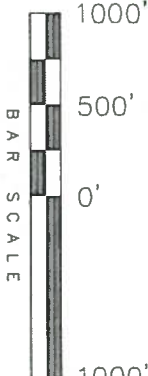
Survey Plat

T6S, R93W, 6th P.M.

ENCANA OIL & GAS (USA) INC

WELL LOCATION, ALP FEE 24-2C (J24NW), LOCATED AS SHOWN IN THE NW 1/4 SE 1/4 OF SECTION 24, T6S, R93W, 6th P.M. GARFIELD COUNTY, COLORADO.

TARGET BOTTOM HOLE, ALP FEE 24-2C (J24NW), LOCATED AS SHOWN IN THE NW 1/4 NE 1/4 OF SECTION 24, T6S, R93W, 6th P.M. GARFIELD COUNTY, COLORADO.



WELL LOCATION:

ALP FEE 24-2C (J24NW)

ELEV. UNGRADED GROUND = 5678.0'

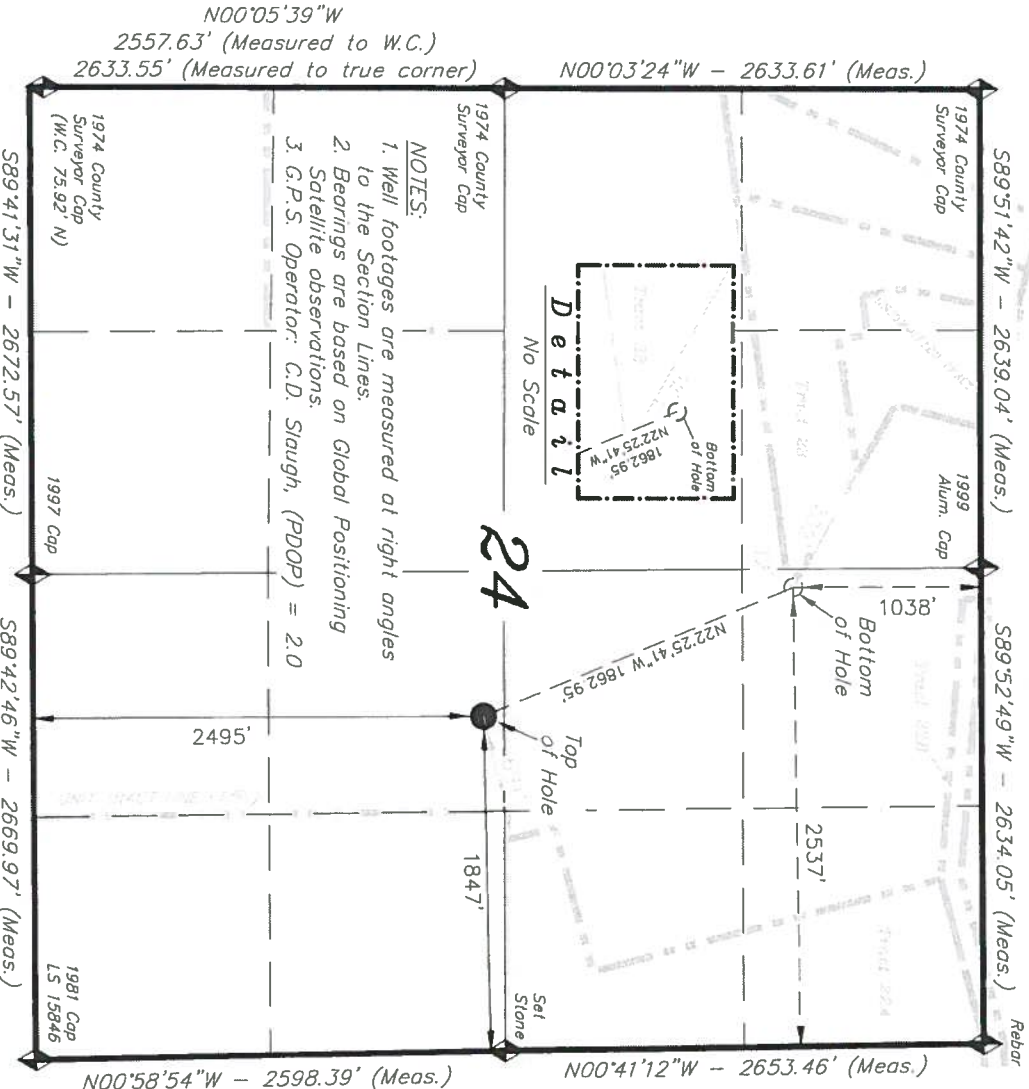
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF A SURVEY MADE BY ME OR UNDER MY SUPERVISION. THE LOCATION HAS BEEN STAKED ON THE GROUND AS SHOWN ON THE PLAT, AND THAT THE SAME IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION No. 389125
STATE OF COLORADO
30125

TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078
(435) 781-2501

DATE SURVEYED:	SURVEYED BY: C.D.S.	SHEET
12-08-11		2b
DATE DRAWN:	DRAWN BY: M.W.	OF 8
03-19-12		
REVISED:	SCALE: 1" = 1000'	
01-29-13 M.W.		



= SECTION CORNERS LOCATED

Basis of elevation is the Rifle 2 Triangulation Station. 39°31'53.80" N Lat. & 107°47'07.78" W Long. (NAD 83). Elevation = 5323.1' (NAVD88).

NAD 83 (SURFACE LOCATION)
LATITUDE = 39°30'41.83" (39.511620°)
LONGITUDE = 107°43'17.35" (107.721486°)
NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 39°30'58.85" (39.516348°)
LONGITUDE = 107°43'26.40" (107.724001°)

MAR - 7 2013



02165743



Directional Survey

Project: Mamm Creek
Site: J24NW Pad
Well: ALP FEE 24-2C
Wellbore: OH
Design: Plan #1

MAR - 7 2013

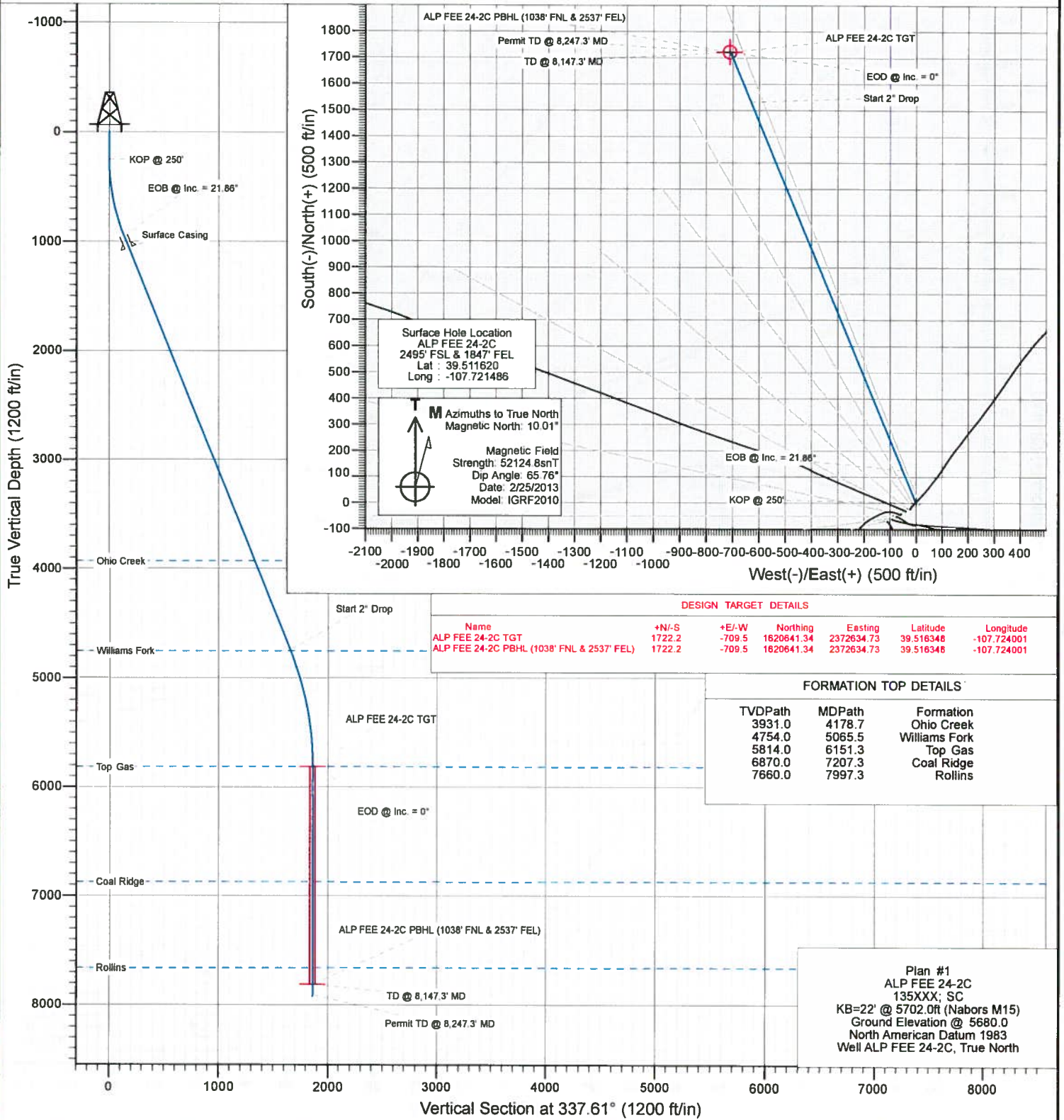
COGCC

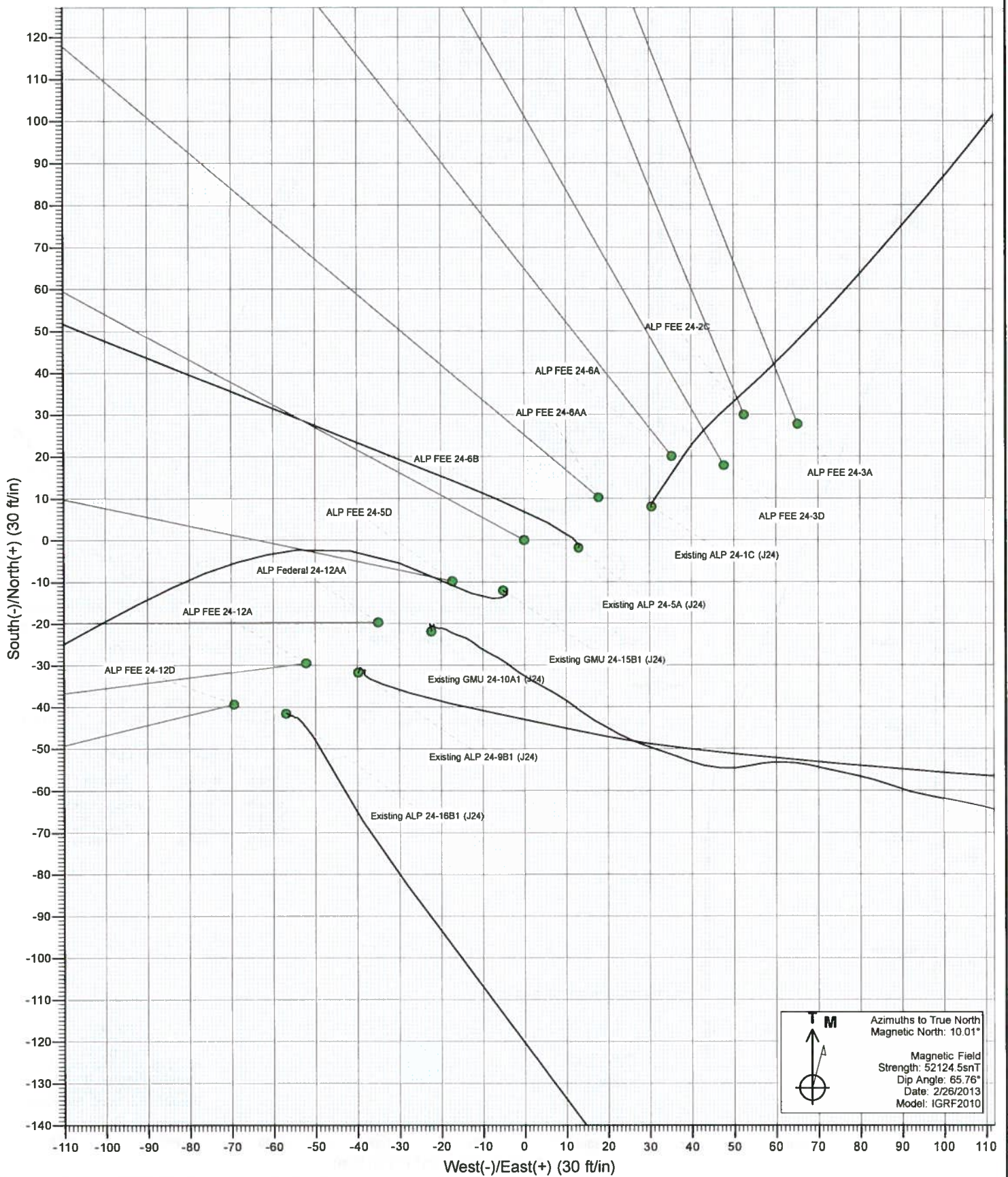


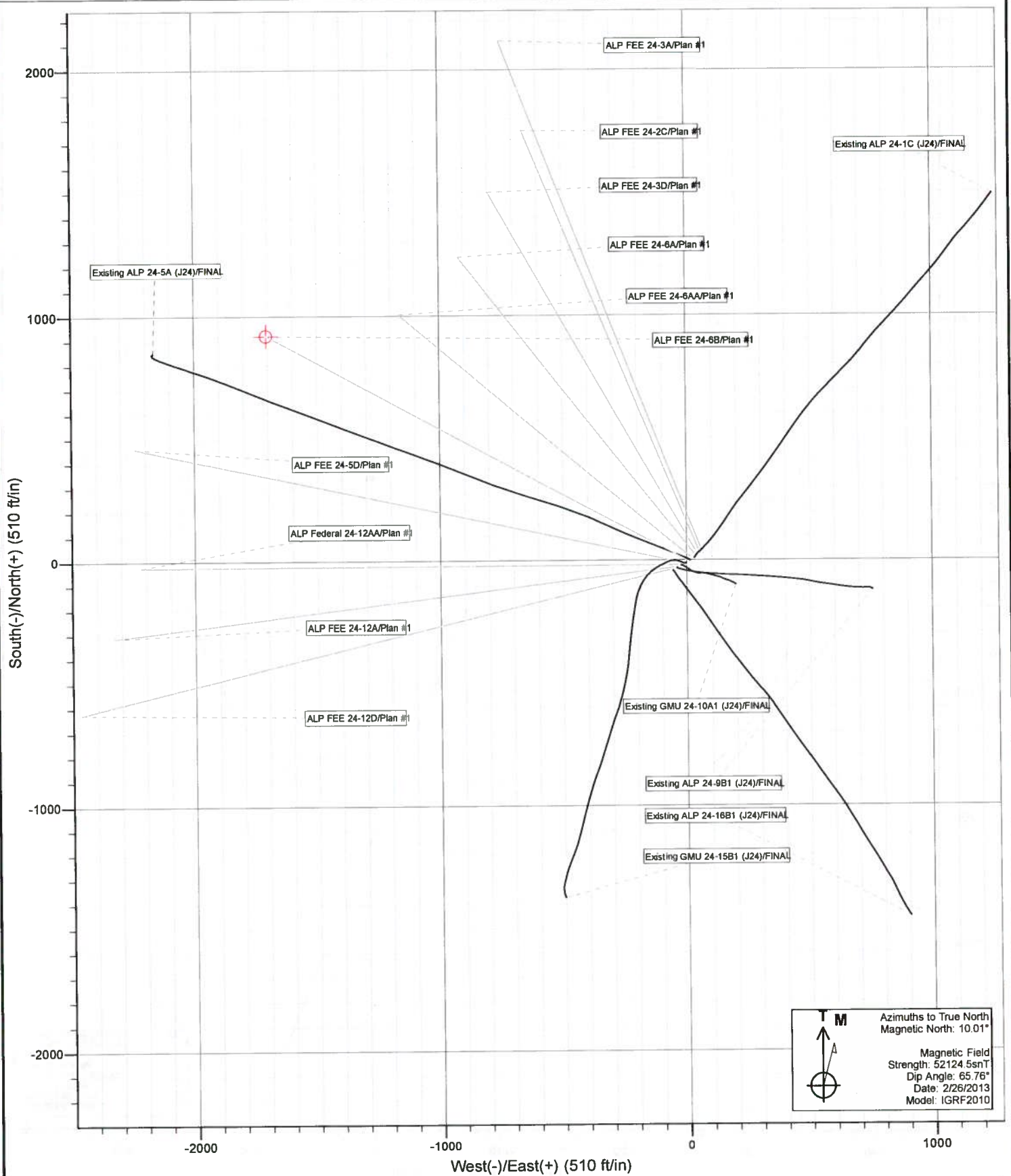
CATHEDRAL

SECTION 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	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	978.8	21.86	337.61	961.2	127.0	-52.3	3.00	337.61	137.4	
4	5058.1	21.86	337.61	4747.1	1531.6	-631.0	0.00	0.00	1656.5	
5	6151.3	0.00	0.00	5814.0	1722.2	-709.5	2.00	180.00	1862.6	ALP FEE 24-2C TGT
6	8147.3	0.00	0.00	7810.0	1722.2	-709.5	0.00	0.00	1862.6	ALP FEE 24-2C PBHL (1038' FNL & 2537' FEL)
7	8247.3	0.00	0.00	7910.0	1722.2	-709.5	0.00	0.00	1862.6	

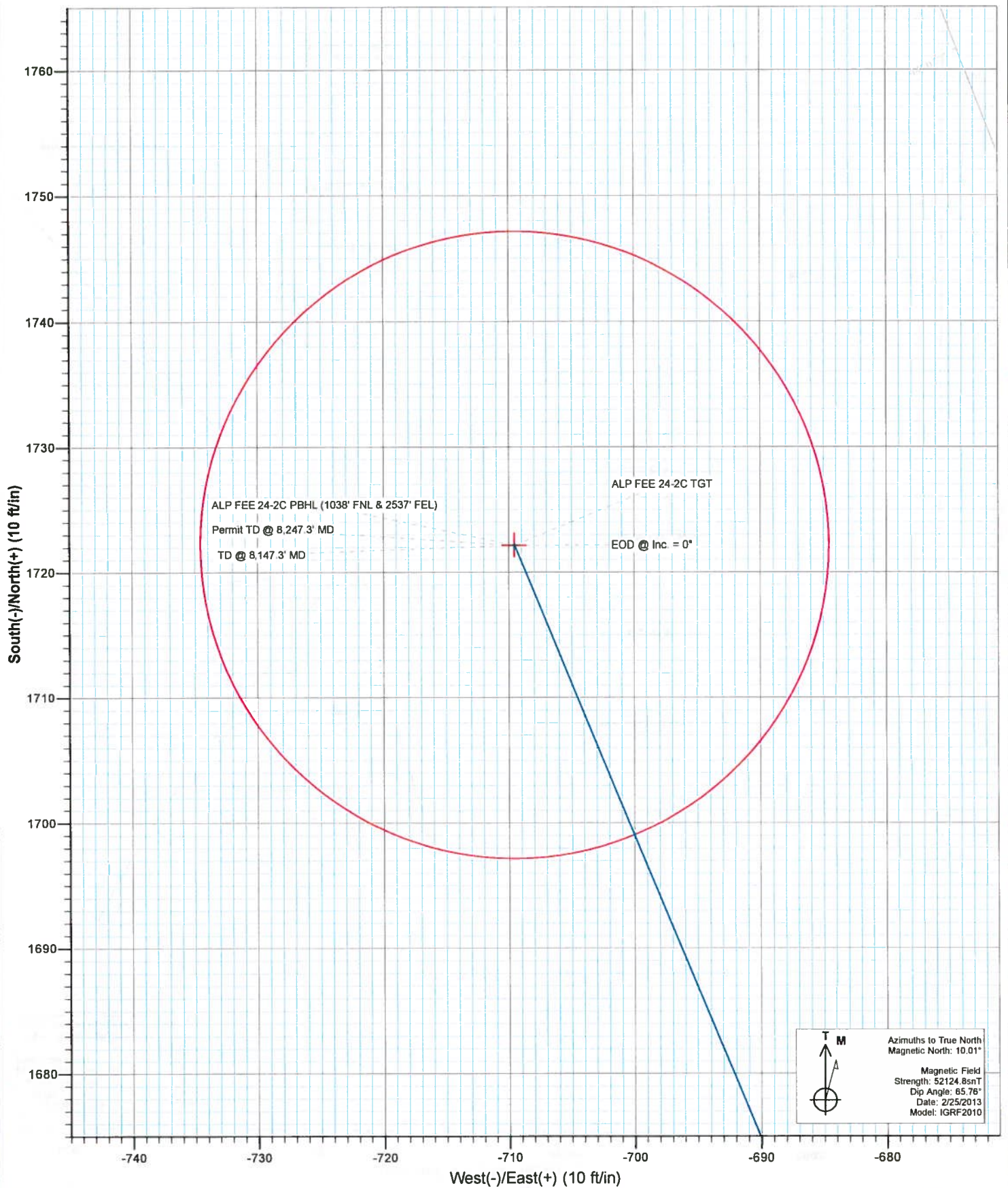








Project: Mamm Creek
Site: J24NW Pad
Well: ALP FEE 24-2C
Wellbore: OH
Plan: Plan #1



Cathedral Energy Services
Planning Report

RECEIVED
MAR - 7 2013
COGCC

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well ALP FEE 24-2C
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=22' @ 5702.0ft (Nabors M15)
Project:	Mamm Creek	MD Reference:	KB=22' @ 5702.0ft (Nabors M15)
Site:	J24NW Pad	North Reference:	True
Well:	ALP FEE 24-2C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Mamm Creek		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		J24NW Pad			
Site Position:		Northing:	1,618,899.86 ft	Latitude:	39.511614
From:	Lat/Long	Easting:	2,373,314.58 ft	Longitude:	-107.721441
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.40 °

Well	ALP FEE 24-2C					
Well Position	+N/-S	0.0 ft	Northing:	1,618,902.34 ft	Latitude:	39.511620
	+E/-W	0.0 ft	Easting:	2,373,301.94 ft	Longitude:	-107.721486
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,680.0 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/25/2013	10.01	65.76	52,125

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	337.61

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Buid Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
978.8	21.86	337.61	961.2	127.0	-52.3	3.00	3.00	0.00	337.61	
5,058.1	21.86	337.61	4,747.1	1,531.6	-631.0	0.00	0.00	0.00	0.00	
6,151.3	0.00	0.00	5,814.0	1,722.2	-709.5	2.00	-2.00	0.00	180.00	ALP FEE 24-2C TGT
8,147.3	0.00	0.00	7,810.0	1,722.2	-709.5	0.00	0.00	0.00	0.00	ALP FEE 24-2C PBHI
8,247.3	0.00	0.00	7,910.0	1,722.2	-709.5	0.00	0.00	0.00	0.00	

Cathedral Energy Services
Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well ALP FEE 24-2C
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=22' @ 5702.0ft (Nabors M15)
Project:	Mamm Creek	MD Reference:	KB=22' @ 5702.0ft (Nabors M15)
Site:	J24NW Pad	North Reference:	True
Well:	ALP FEE 24-2C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	KOP @ 250'
300.0	1.50	337.61	300.0	0.6	-0.2	0.7	3.00	3.00	
400.0	4.50	337.61	399.8	5.4	-2.2	5.9	3.00	3.00	
500.0	7.50	337.61	499.3	15.1	-6.2	16.3	3.00	3.00	
600.0	10.50	337.61	598.0	29.6	-12.2	32.0	3.00	3.00	
700.0	13.50	337.61	695.8	48.8	-20.1	52.8	3.00	3.00	
800.0	16.50	337.61	792.4	72.7	-30.0	78.6	3.00	3.00	
900.0	19.50	337.61	887.5	101.3	-41.7	109.5	3.00	3.00	
978.8	21.86	337.61	961.2	127.0	-52.3	137.4	3.00	3.00	EOB @ Inc. = 21.86°
1,000.0	21.86	337.61	980.9	134.3	-55.3	145.3	0.00	0.00	
1,078.8	21.86	337.61	1,054.0	161.4	-66.5	174.6	0.00	0.00	Surface Casing
1,100.0	21.86	337.61	1,073.7	168.7	-69.5	182.5	0.00	0.00	
1,200.0	21.86	337.61	1,166.5	203.2	-83.7	219.8	0.00	0.00	
1,300.0	21.86	337.61	1,259.3	237.6	-97.9	257.0	0.00	0.00	
1,400.0	21.86	337.61	1,352.1	272.0	-112.1	294.2	0.00	0.00	
1,500.0	21.86	337.61	1,445.0	306.5	-126.3	331.5	0.00	0.00	
1,600.0	21.86	337.61	1,537.8	340.9	-140.5	368.7	0.00	0.00	
1,700.0	21.86	337.61	1,630.6	375.3	-154.6	406.0	0.00	0.00	
1,800.0	21.86	337.61	1,723.4	409.8	-168.8	443.2	0.00	0.00	
1,900.0	21.86	337.61	1,816.2	444.2	-183.0	480.4	0.00	0.00	
2,000.0	21.86	337.61	1,909.0	478.6	-197.2	517.7	0.00	0.00	
2,100.0	21.86	337.61	2,001.8	513.1	-211.4	554.9	0.00	0.00	
2,200.0	21.86	337.61	2,094.6	547.5	-225.6	592.2	0.00	0.00	
2,300.0	21.86	337.61	2,187.4	581.9	-239.8	629.4	0.00	0.00	
2,400.0	21.86	337.61	2,280.2	616.4	-253.9	666.6	0.00	0.00	
2,500.0	21.86	337.61	2,373.0	650.8	-268.1	703.9	0.00	0.00	
2,600.0	21.86	337.61	2,465.8	685.2	-282.3	741.1	0.00	0.00	
2,700.0	21.86	337.61	2,558.6	719.7	-296.5	778.4	0.00	0.00	
2,800.0	21.86	337.61	2,651.4	754.1	-310.7	815.6	0.00	0.00	
2,900.0	21.86	337.61	2,744.3	788.5	-324.9	852.8	0.00	0.00	
3,000.0	21.86	337.61	2,837.1	823.0	-339.1	890.1	0.00	0.00	
3,100.0	21.86	337.61	2,929.9	857.4	-353.2	927.3	0.00	0.00	
3,200.0	21.86	337.61	3,022.7	891.8	-367.4	964.6	0.00	0.00	
3,300.0	21.86	337.61	3,115.5	926.3	-381.6	1,001.8	0.00	0.00	
3,400.0	21.86	337.61	3,208.3	960.7	-395.8	1,039.0	0.00	0.00	
3,500.0	21.86	337.61	3,301.1	995.1	-410.0	1,076.3	0.00	0.00	
3,600.0	21.86	337.61	3,393.9	1,029.6	-424.2	1,113.5	0.00	0.00	
3,700.0	21.86	337.61	3,486.7	1,064.0	-438.4	1,150.8	0.00	0.00	
3,800.0	21.86	337.61	3,579.5	1,098.4	-452.6	1,188.0	0.00	0.00	
3,900.0	21.86	337.61	3,672.3	1,132.9	-466.7	1,225.2	0.00	0.00	
4,000.0	21.86	337.61	3,765.1	1,167.3	-480.9	1,262.5	0.00	0.00	
4,100.0	21.86	337.61	3,857.9	1,201.7	-495.1	1,299.7	0.00	0.00	
4,178.7	21.86	337.61	3,931.0	1,228.8	-506.3	1,329.0	0.00	0.00	Ohio Creek
4,200.0	21.86	337.61	3,950.7	1,236.2	-509.3	1,337.0	0.00	0.00	
4,300.0	21.86	337.61	4,043.5	1,270.6	-523.5	1,374.2	0.00	0.00	
4,400.0	21.86	337.61	4,136.4	1,305.0	-537.7	1,411.4	0.00	0.00	
4,500.0	21.86	337.61	4,229.2	1,339.5	-551.9	1,448.7	0.00	0.00	
4,600.0	21.86	337.61	4,322.0	1,373.9	-566.0	1,485.9	0.00	0.00	
4,700.0	21.86	337.61	4,414.8	1,408.3	-580.2	1,523.2	0.00	0.00	

Cathedral Energy Services
Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well ALP FEE 24-2C
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=22' @ 5702.0ft (Nabors M15)
Project:	Mamm Creek	MD Reference:	KB=22' @ 5702.0ft (Nabors M15)
Site:	J24NW Pad	North Reference:	True
Well:	ALP FEE 24-2C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,800.0	21.86	337.61	4,507.6	1,442.8	-594.4	1,560.4	0.00	0.00	
4,900.0	21.86	337.61	4,600.4	1,477.2	-608.6	1,597.6	0.00	0.00	
5,000.0	21.86	337.61	4,693.2	1,511.6	-622.8	1,634.9	0.00	0.00	
5,058.1	21.86	337.61	4,747.1	1,531.6	-631.0	1,656.5	0.00	0.00	Start 2" Drop
5,065.5	21.72	337.61	4,754.0	1,534.2	-632.1	1,659.3	2.00	-2.00	Williams Fork
5,100.0	21.03	337.61	4,786.1	1,545.8	-636.9	1,671.8	2.00	-2.00	
5,200.0	19.03	337.61	4,880.1	1,577.4	-649.9	1,706.1	2.00	-2.00	
5,300.0	17.03	337.61	4,975.2	1,606.1	-661.7	1,737.0	2.00	-2.00	
5,400.0	15.03	337.61	5,071.3	1,631.6	-672.2	1,764.6	2.00	-2.00	
5,500.0	13.03	337.61	5,168.3	1,654.0	-681.4	1,788.9	2.00	-2.00	
5,600.0	11.03	337.61	5,266.1	1,673.3	-689.4	1,809.7	2.00	-2.00	
5,700.0	9.03	337.61	5,364.5	1,689.4	-696.0	1,827.1	2.00	-2.00	
5,800.0	7.03	337.61	5,463.6	1,702.3	-701.3	1,841.1	2.00	-2.00	
5,900.0	5.03	337.61	5,563.0	1,712.0	-705.3	1,851.6	2.00	-2.00	
6,000.0	3.03	337.61	5,662.7	1,718.5	-708.0	1,858.6	2.00	-2.00	
6,100.0	1.03	337.61	5,762.7	1,721.7	-709.4	1,862.1	2.00	-2.00	
6,151.3	0.00	0.00	5,814.0	1,722.2	-709.5	1,862.6	2.00	-2.00	EOD @ Inc. = 0° - Top Gas
6,200.0	0.00	0.00	5,862.7	1,722.2	-709.5	1,862.6	0.00	0.00	
6,300.0	0.00	0.00	5,962.7	1,722.2	-709.5	1,862.6	0.00	0.00	
6,400.0	0.00	0.00	6,062.7	1,722.2	-709.5	1,862.6	0.00	0.00	
6,500.0	0.00	0.00	6,162.7	1,722.2	-709.5	1,862.6	0.00	0.00	
6,600.0	0.00	0.00	6,262.7	1,722.2	-709.5	1,862.6	0.00	0.00	
6,700.0	0.00	0.00	6,362.7	1,722.2	-709.5	1,862.6	0.00	0.00	
6,800.0	0.00	0.00	6,462.7	1,722.2	-709.5	1,862.6	0.00	0.00	
6,900.0	0.00	0.00	6,562.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,000.0	0.00	0.00	6,662.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,100.0	0.00	0.00	6,762.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,200.0	0.00	0.00	6,862.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,207.3	0.00	0.00	6,870.0	1,722.2	-709.5	1,862.6	0.00	0.00	Coal Ridge
7,300.0	0.00	0.00	6,962.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,400.0	0.00	0.00	7,062.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,500.0	0.00	0.00	7,162.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,600.0	0.00	0.00	7,262.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,700.0	0.00	0.00	7,362.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,800.0	0.00	0.00	7,462.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,900.0	0.00	0.00	7,562.7	1,722.2	-709.5	1,862.6	0.00	0.00	
7,997.3	0.00	0.00	7,660.0	1,722.2	-709.5	1,862.6	0.00	0.00	Rollins
8,000.0	0.00	0.00	7,662.7	1,722.2	-709.5	1,862.6	0.00	0.00	
8,100.0	0.00	0.00	7,762.7	1,722.2	-709.5	1,862.6	0.00	0.00	
8,147.3	0.00	0.00	7,810.0	1,722.2	-709.5	1,862.6	0.00	0.00	TD @ 8,147.3' MD
8,200.0	0.00	0.00	7,862.7	1,722.2	-709.5	1,862.6	0.00	0.00	
8,247.3	0.00	0.00	7,910.0	1,722.2	-709.5	1,862.6	0.00	0.00	Permit TD @ 8,247.3' MD

Cathedral Energy Services
Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well ALP FEE 24-2C
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB=22' @ 5702.0ft (Nabors M15)
Project:	Mamm Creek	MD Reference:	KB=22' @ 5702.0ft (Nabors M15)
Site:	J24NW Pad	North Reference:	True
Well:	ALP FEE 24-2C	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
ALP FEE 24-2C TGT	0.00	0.00	5,814.0	1,722.2	-709.5	1,620,641.34	2,372,634.73	39.516348	-107.724001
- plan hits target center									
- Point									
ALP FEE 24-2C PBHL (-	0.00	0.00	7,810.0	1,722.2	-709.5	1,620,641.34	2,372,634.73	39.516348	-107.724001
- plan hits target center									
- Circle (radius 25.0)									

Casing Points				
Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
(ft)	(ft)	Name	(in)	(in)
1,078.8	1,054.0	Surface Casing		

Formations					
Measured Depth	Vertical Depth			Dip	Dip Direction
(ft)	(ft)	Name	Lithology	(°)	(°)
4,178.7	3,931.0	Ohio Creek			
5,065.5	4,754.0	Williams Fork			
6,151.3	5,814.0	Top Gas			
7,207.3	6,870.0	Coal Ridge			
7,997.3	7,660.0	Rollins			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
250.0	250.0	0.0	0.0	KOP @ 250'
978.8	961.2	127.0	-52.3	EOB @ Inc. = 21.86°
5,058.1	4,747.1	1,531.6	-631.0	Start 2" Drop
6,151.3	5,814.0	1,722.2	-709.5	EOD @ Inc. = 0°
8,147.3	7,810.0	1,722.2	-709.5	TD @ 8,147.3' MD
8,247.3	7,910.0	1,722.2	-709.5	Permit TD @ 8,247.3' MD