

Confidentiality Requested:

☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1091956

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- ☐ New Well ☐ Re-Entry ☐ Workover
- ☐ Oil ☐ WSW ☐ SWD ☐ SIOW
- ☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
- ☐ OG ☐ GSW ☐ Temp. Abd.
- ☐ CM (Coal Bed Methane)
- ☐ Cathodic ☐ Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- ☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
- ☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer
- ☐ Commingled Permit #: _____
- ☐ Dual Completion Permit #: _____
- ☐ SWD Permit #: _____
- ☐ ENHR Permit #: _____
- ☐ GSW Permit #: _____

Spud Date or
Recompletion Date

Date Reached TD

Completion Date or
Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

_____ Feet from ☐ North / ☐ South Line of Section

_____ Feet from ☐ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:

☐ NE ☐ NW ☐ SE ☐ SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? ☐ Yes ☐ No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

☐ Confidentiality Requested

Date: _____

☐ Confidential Release Date: _____

☐ Wireline Log Received

☐ Geologist Report Received

☐ UIC Distribution

ALT ☐ I ☐ II ☐ III Approved by: _____ Date: _____



1091956

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken (Attach Additional Sheets)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
____ Perforate				
____ Protect Casing				
____ Plug Back TD				
____ Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☐ No (If No, skip questions 2 and 3)

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No (If No, skip question 3)

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No (If No, fill out Page Three of the ACO-1)

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)		Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR.		Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____		
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease (If vented, Submit ACO-18.)	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled (Submit ACO-5) <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	EnCana Oil & Gas (USA) Inc.
Well Name	Jasper 12H 2
Doc ID	1091956

All Electric Logs Run

Sonic Gamma Ray
Spectral Density Dual Spaced Neutron Gamma Ray Memory
FMI
MWD Log
Mud Log
Composite Geofrac
Petrophysical

Form	ACO1 - Well Completion
Operator	EnCana Oil & Gas (USA) Inc.
Well Name	Jasper 12H 2
Doc ID	1091956

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Conductor	16	14	46	80	Grout	56	
Surface	12.25	9.625	36	2118	Extendacement, Halcem	760	2% CC, .125# Polyeflake, 1% CC
Intermediate	8.75	7	26	5350	Class A	220	.025# Polyeflake
Liner	6.125	4.5	11.6	8937	Class A	435	0.4% HaladR-9, 0.25# Polyeflake, 2% Bentonite

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

November 08, 2012

Sharon Cook
EnCana Oil & Gas (USA) Inc.
5851 LEGACY CIRCLE
PLANO, TX 75024

Re: ACO1
API 15-101-22381-01-00
Jasper 12H 2
SW/4 Sec.12-20S-29W
Lane County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

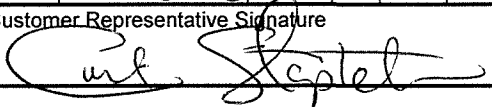
Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Sharon Cook

The Road to Excellence Starts with Safety

Sold To #: 340078		Ship To #: 2936581		Quote #:		Sales Order #: 9684099	
Customer: ENCANA OIL & GAS (USA) INC. - EBUS				Customer Rep: Scotts, Steve			
Well Name: Jasper 12H			Well #: 2		API/UWI #: 15-101-22381		
Field:		City (SAP): DIGHTON		County/Parish: Lane		State: Kansas	
Legal Description: Section 12 Township 20S Range 29W							
Contractor: Precision				Rig/Platform Name/Num: 207			
Job Purpose: Cement Surface Casing							
Well Type: Development Well				Job Type: Cement Surface Casing			
Sales Person: DAIGLE, COLTER				Srvc Supervisor: AGUILERA, FABIAN		MBU ID Emp #: 442123	
Job Personnel							
HES Emp Name		Exp Hrs	Emp #	HES Emp Name		Exp Hrs	Emp #
AGUILERA, FABIAN J		12	442123	BERUMEN, EDUARDO		012	267804
				HEIDT, JAMES Nicholas		12	517102
Equipment							
HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
Job Hours							
Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours
7/23/2012	12	1.5					
TOTAL				<i>Total is the sum of each column separately</i>			
Job				Job Times			
Formation Name				Date			
Formation Depth (MD) Top				Time			
Bottom				Time Zone			
Called Out				Time			
Form Type				On Location			
Job depth MD				Job Started			
Water Depth				Job Completed			
Perforation Depth (MD) From				Departed Loc			
To				Time			
Well Data				Time Zone			
Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade
Surface Casing Open Hole				12.25			
Preset Conductor	Unknown		14.	13.344	50.		J-55
Surface Casing	Unknown		9.625	8.921	36.		
Sales/Rental/3rd Party (HES)							
Description						Qty	Qty uom
PLUG,CMTG,TOP,9 5/8,HWE,8.16 MIN/9.06 MA						1	EA
SUGAR - GRANULATED						100	LB
Tools and Accessories							
Type	Size	Qty	Make	Depth	Type	Size	Qty
Guide Shoe					Packer		
Float Shoe					Bridge Plug		
Float Collar					Retainer		
Insert Float							
Stage Tool							
Miscellaneous Materials							
Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld		Inhibitor		Sand Type	Size		

Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	
1	ExtendaCem	EXTENDACEM (TM) SYSTEM (452981)	480.0	sacks	12.4	2.1	11.61		11.61	
	2 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)								
	0.25 lbm	POLY-E-FLAKE (101216940)								
	11.607 Gal	FRESH WATER								
2	HalCem	HALCEM (TM) SYSTEM (452986)	280.0	sacks	15.6	1.19	5.3		5.3	
	1 %	CALCIUM CHLORIDE, PELLET, 50 LB (101509387)								
	0.125 lbm	POLY-E-FLAKE (101216940)								
	5.302 Gal	FRESH WATER								
3	Top Out Cement	CMT - STANDARD CEMENT (100003684)	200.0	sacks	15.6	1.18	5.25		5.25	
	94 lbm	CMT - STANDARD - CLASS A REG OR TYPE I, BULK (100003684)								
	5.245 Gal	FRESH WATER								
Calculated Values		Pressures		Volumes						
Displacement	160 BBL	Shut In: Instant		Lost Returns	0	Cement Slurry	238 BBL	Pad		
Top Of Cement	SURFACE	5 Min		Cement Returns	116 BBL	Actual Displacement	159 BBL	Treatment		
Frac Gradient		15 Min		Spacers	15 BBL	Load and Breakdown		Total Job		
Rates										
Circulating	4	Mixing	5	Displacement	8	Avg. Job	5			
Cement Left In Pipe	Amount	40 ft	Reason	Shoe Joint						
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID			
The Information Stated Herein Is Correct				Customer Representative Signature 						

The Road to Excellence Starts with Safety

Sold To #: 340078	Ship To #: 2936581	Quote #:	Sales Order #: 9684099
Customer: ENCANA OIL & GAS (USA) INC. - EBUS		Customer Rep: Scotts, Steve	
Well Name: Jasper 12H	Well #: 2	API/UWI #: 15-101-22381	
Field:	City (SAP): DIGHTON	County/Parish: Lane	State: Kansas
Legal Description: Section 12 Township 20S Range 29W			
Lat: N 0 deg. OR N 0 deg. 0 min. 0 secs.		Long: E 0 deg. OR E 0 deg. 0 min. 0 secs.	
Contractor: Precision		Rig/Platform Name/Num: 207	
Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: DAIGLE, COLTER		Srvc Supervisor: AGUILERA, FABIAN	MBU ID Emp #: 442123

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	07/23/2012 02:00							CREW CALLED OUT FOR ENCANA OIL, JASPER 12H- 2, 9 5/8 SURFACE
Pre-Convoy Safety Meeting	07/23/2012 02:30							DISCUSSED ALL POTENTIAL ROAD HAZARDS WITH HES CREW
Crew Leave Yard	07/23/2012 03:00							CALL IN JOURNEY MANAGEMENT, IN ROUTE TO ENCANA OIL, JASPER 12H- 2
Arrive At Loc	07/23/2012 04:30							ARRIVE AT LOCATION
Assessment Of Location Safety Meeting	07/23/2012 05:00							ASSESSED THE LOCATION, SPOT IN EQUIPMENT, WATER TESTED GOOD, GOT WITH CM AND WENT OVER JOB DEPTH AND NUMBERS, AT THIS TIME RIG CREW IS STILL RUNNING CASING DOWNHOLE
Pre-Rig Up Safety Meeting	07/23/2012 05:15							DISCUSSED ALL POTENTIAL HAZARDS AND PINCH POINTS WITH HES CREW
Rig-Up Equipment	07/23/2012 05:30							RIG UP IRON AND WATER HOSES
Rig-Up Completed	07/23/2012 06:30							RIG UP WENT WELL AND SAFELY
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

Other	07/23/2012 10:00							AT THIS TIME CASING DONE RUNNING CASING DOWNHOLE, CM SAID THEY HAVE GOOD RETURNS, GOING TO CIRCULATE FOR ABOUT 1 AND 1/2 HOURS
Pre-Job Safety Meeting	07/23/2012 12:30							DISCUSSED ALL POTENTIAL HAZARDS WHEN PRESSURE IS PRESENT WITH HES AND RIG CREW, WENT OVER JOB SCHEDULE AND NUMBERS WITH CM, AT THIS TIME THEY HAVE GOOD RETURNS
Start Job	07/23/2012 12:56							
Test Lines	07/23/2012 12:57							TEST LINES TO 2000 PSI
Pump Lead Cement	07/23/2012 13:06		5	179			70.0	PUMP LEAD CEMENT= 480 SKS = 179 BBL @ 12.4#
Pump Tail Cement	07/23/2012 13:37		5	59			120.0	PUMP TAIL CEMENT = 280 SKS = 59 BBL @ 15.6#
Clean Lines	07/23/2012 13:50							STOP CLEAN LINES AND TUB
Drop Top Plug	07/23/2012 13:51							DROP TOP PLUG
Pump Displacement	07/23/2012 13:52		5	160			130.0	PUMP DISPLACEMENT OF 160 BBL
Displ Reached Cmmt	07/23/2012 14:07		5		90		300.0	DISPLACEMENT REACH CEMENT AT 90 BBL AT 300 PSI
Slow Rate	07/23/2012 14:15		2		150		600.0	SLOW RATE TO 2 BPM TO BUMP PLUG AT 150 BBL GONE
Bump Plug	07/23/2012 14:19				160		850.0	BUMP PLUG AT 850 PSI
Check Floats	07/23/2012 14:21						1150. 0	FLOATS HELD GOOD, RELEASE PRESSURE AND GOT BACK 1 BBL
End Job	07/23/2012 14:30							
Pre-Rig Down Safety Meeting	07/23/2012 14:45							DISCUSSED ALL POTENTIAL HAZARDS AND PINCH POINTS WITH HES CREW
Rig-Down Equipment	07/23/2012 15:00							RIG DOWN IRON AND WATER HOSES

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Rig-Down Completed	07/23/2012 16:00							RIG DOWN WENT WELL AND SAFELY
Pre-Convoy Safety Meeting	07/23/2012 16:30							DISCUSSED ALL POTENTIAL ROAD HAZARDS WITH HES CREW
Crew Leave Location	07/23/2012 17:00							THANK YOU FOR CHOOSING HALLIBURTON, FABIAN AND CREW

Work Order Contract

Order Number

9684099

TO: HALLIBURTON ENERGY SERVICES, INC. - YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICE PERSONNEL TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO CUSTOMER LISTED BELOW AND DELIVER AND SELL PRODUCTS, SUPPLIES AND MATERIALS FOR THE PURPOSE OF SERVICING:

Well No. 2	Farm or Lease Jasper 12H	County Lane	State Kansas	Well Permit Number 15-101-22381
Customer ENCANA OIL & GAS (USA) INC. - EBUS		Well Owner		Job Purpose Cement Surface Casing

THIS WORK ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

A. CUSTOMER REPRESENTATION - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton Energy Services, Inc. (hereinafter "Halliburton").

B. PRICE AND PAYMENT - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices of Halliburton are exclusive of any federal, state or municipal taxes which may be imposed on the sale or use of any materials, products or supplies furnished or services performed. Customer agrees to pay such taxes in addition to the prices in Halliburton's price list. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, or Halliburton's actual attorney fees, whichever is greater, plus all collection and court costs. Customer agrees that the amount of attorney fees set out herein are reasonable and necessary.

C. RELEASE AND INDEMNITY - Customer agrees to RELEASE Halliburton Group from any and all liability for any and all damages whatsoever to property of any kind owned by, in the possession of, or leased by Customer and those persons and entities Customer has the ability to bind by contract or which are co-interest owners or joint ventures with Customer. Customer also agrees to DEFEND, INDEMNIFY, AND HOLD Halliburton Group HARMLESS from and against any and all liability, claims, costs, expenses, attorney fees and damages whatsoever for personal injury, illness, death, property damage and loss resulting from loss of well control; services to control a wild well whether underground or above the surface; reservoir or underground damage, including loss of oil, gas, other mineral substances or water; surface damage arising from underground damage; damage to or loss of the well bore; subsurface trespass or any action in the nature thereof; fire; explosion; subsurface pressure; radioactivity; and pollution and contamination and its cleanup and control.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations will apply even if the liability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of one or more members of the Halliburton Group, the unseaworthiness of any vessel or any defect in the data, products, supplies, materials or equipment furnished by any member or members of the Halliburton Group whether in the design, manufacture, maintenance or marketing thereof or from a failure to warn of such defect. "Halliburton Group" is defined as Halliburton Energy Services, Inc., its parent, subsidiary, and affiliated companies, insurers and subcontractors and all its/their officers, directors, employees, consultants and agents. Customer's RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations apply whether the personal injury, illness, death, property damage or loss is suffered by one or more members of the Halliburton Group, Customer, or any other person or entity. Customer agrees to support such obligations assumed herein with liability insurance with limits of not less than \$500,000. Customer agrees to name Halliburton Group as named additional insured on all of its general liability policy(s). Customer agrees that its liability under this Contract is not limited by the amounts of its insurance coverage, except where and as may be required by applicable local law for the provisions of this Contract to be enforceable.

D. EQUIPMENT LIABILITY - Customer shall at its risk and expense attempt to recover any Halliburton Group equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the current published replacement rate, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton Group. Customer shall be responsible for damage to or loss of Halliburton group equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton group equipment damaged by corrosion or abrasion due to well effluents.

E. LIMITED WARRANTY - Halliburton warrants only title to the equipment, products, and materials supplied under this Contract and that same are free from defects in workmanship and materials for thirty (30) days from the date of delivery. **THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE.** Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, **HALLIBURTON IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON GROUP.** Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton Group shall not be liable for and **CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION**, even if such is contributed to or caused by the active or passive negligence, fault or strict liability of any member or members of Halliburton Group. Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. GOVERNING LAW - The validity, interpretation and construction of this Contract shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.

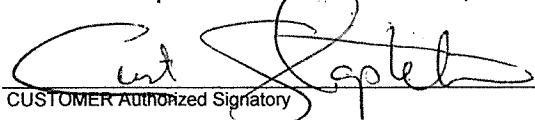
G. DISPUTE RESOLUTION Except for Halliburton's statutory rights with regard to collection of past due invoices for services or materials, including the Contractor's statutory rights for perfection and enforcement of mechanics' and materialmen's liens, Customer and Halliburton agree that any dispute that may arise out of the performance of this Contract shall be resolved by binding arbitration by a panel of three arbitrators under the rules of the American Arbitration Association. The arbitration will take place in Houston, TX.

H. SEVERABILITY - If any provision or part thereof of this Contract shall be held to be invalid, void, or of no effect for any reason, such holding shall not be deemed to affect the validity of the remaining provisions of this Contract which can be given effect, without the invalid provision or part thereof, and to this end, the provisions of this Contract are declared to be severable. Customer and Halliburton agree that any provision of this Contract that is unenforceable or void under applicable law will be modified to achieve the intent of the parties hereunder to the greatest extent allowed by applicable law.

I. MODIFICATIONS - Customer agrees that Halliburton shall not be bound by any modifications to this Contract, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President - Legal, 10200 Bellaire Blvd, Houston, TX 77072-5299.

I HAVE READ AND UNDERSTAND THIS WORK ORDER CONTRACT WHICH CONTAINS RELEASE AND INDEMNITY LANGUAGE WHICH CUSTOMER ACKNOWLEDGES IS CONSPICUOUS AND AFFORDS FAIR AND ADEQUATE NOTICE AND I REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT. I AM SIGNING THIS WORK ORDER CONTRACT WITH THE UNDERSTANDING THAT ITS TERMS AND CONDITIONS WILL NOT APPLY TO THE EXTENT THEY CONFLICT WITH TERMS AND CONDITIONS OF A SIGNED MASTER SERVICE CONTRACT BETWEEN THE PARTIES.

Customer Acceptance of Terms and Conditions, Materials and Services



CUSTOMER Authorized Signatory

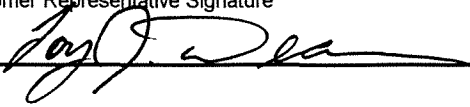
Date

The Road to Excellence Starts with Safety

Sold To #: 340078		Ship To #: 2936581		Quote #:		Sales Order #: 9701327	
Customer: ENCANA OIL & GAS (USA) INC. - EBUS				Customer Rep: Dean, TJ			
Well Name: Jasper 12H			Well #: 2		API/UWI #:		
Field:		City (SAP): DIGHTON		County/Parish: Lane		State: Kansas	
Legal Description: Section 12 Township 20S Range 29W							
Contractor: Precision			Rig/Platform Name/Num: 207				
Job Purpose: Cement Intermediate Casing							
Well Type: Development Well			Job Type: Cement Intermediate Casing				
Sales Person: DAIGLE, COLTER			Srvc Supervisor: DURAN, EDUR			MBU ID Emp #: 445769	
Job Personnel							
HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs
DURAN, EDUR	21	445769	JOHNSON, MATTHEW Warren	21	525955	LOPEZ, CRISTIAN Adrian	21
NORTON, BRUCE Wayne	21	499926					
Equipment							
HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10286731	165 mile	10872308	165 mile	11019295	165 mile	11256865	165 mile
11288858	165 mile						
Job Hours							
Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours
07/31/2012	13	4					
TOTAL			Total is the sum of each column separately				
Job							
Formation Name				Job Times			
Formation Depth (MD) Top Bottom				Date Time Time Zone			
Form Type BHST				Called Out 31 - Jul - 2012 00:00 CST			
Job depth MD 5650. ft Job Depth TVD 5650. ft				On Location 31 - Jul - 2012 07:00 CST			
Water Depth Wk Ht Above Floor 4. ft				Job Started 31 - Jul - 2012 15:20 CST			
Perforation Depth (MD) From To				Job Completed 31 - Jul - 2012 16:20 CST			
				Departed Loc 31 - Jul - 2012 18:20 CST			
Well Data							
Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade
Intermediate Open Hole				8.75			
Intermediate Casing	Unknown		7.	6.366	23.		N-80
Surface Casing	Unknown		9.625	8.921	36.		J-55
Sales/Rental/3 rd Party (HES)							
Description						Qty	Qty uom
PLUG,CMTG,TOP,7,HWE,5.66 MIN/6.54 MAX CS						1	EA
Tools and Accessories							
Type	Size	Qty	Make	Depth	Type	Size	Qty
Guide Shoe					Packer		
Float Shoe					Bridge Plug		
Float Collar					Retainer		
Insert Float							
Stage Tool							
Miscellaneous Materials							
Gelling Agt		Conc		Surfactant		Conc	Acid Type
Treatment Fld		Conc		Inhibitor		Conc	Sand Type

HALLIBURTON

Cementing Job Summary

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Standard	CMT - STANDARD CEMENT (100003684)	220.0	sacks	15.6	1.18	5.2		5.2
	94 lbm	CMT - STANDARD - CLASS A REG OR TYPE I, BULK (100003684)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	5.204 Gal	FRESH WATER							
Calculated Values		Pressures		Volumes					
Displacement	203	Shut In: Instant		Lost Returns	0	Cement Slurry	46	Pad	
Top Of Cement	3694	5 Min		Cement Returns	0	Actual Displacement	203	Treatment	
Frac Gradient		15 Min		Spacers	0	Load and Breakdown		Total Job	
Rates									
Circulating		Mixing	5	Displacement	5	Avg. Job	5		
Cement Left In Pipe	Amount	43 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature 					

The Road to Excellence Starts with Safety

Sold To #: 340078	Ship To #: 2936581	Quote #:	Sales Order #: 9701327
Customer: ENCANA OIL & GAS (USA) INC. - EBUS	Customer Rep: Dean, TJ		
Well Name: Jasper 12H	Well #: 2	API/UWI #:	
Field:	City (SAP): DIGHTON	County/Parish: Lane	State: Kansas
Legal Description: Section 12 Township 20S Range 29W			
Lat:	Long:		
Contractor: Precision	Rig/Platform Name/Num: 207		
Job Purpose: Cement Intermediate Casing	Ticket Amount:		
Well Type: Development Well	Job Type: Cement Intermediate Casing		
Sales Person: DAIGLE, COLTER	Srvc Supervisor: DURAN, EDUR	MBU ID Emp #: 445769	

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	07/31/2012 00:00							CALLED ON JOB REQUESTED TIME ON LOCATION 0700 IN DIGHTON, KS 250 MILES AWAY
Other	07/31/2012 01:30							LOAD EQUIPMENT FOR JOB PLUG CONTAINER, TOP PLUG
Pre-Convoy Safety Meeting	07/31/2012 03:00							DISCUSSED ROUTE OF TRAVEL, TRAFFIC, WILDLIFE, AND WEATHER, MUDDY ROADS, TURN AROUND ON SOLID GROUND
Depart from Service Center or Other Site	07/31/2012 03:15							DEPARTED SERVICE CENTER, NOTIFIED DISPATCH, JOURNEY MANAGEMENT
Arrive At Loc	07/31/2012 07:00							ARRIVED ON LOCATION, CASING CREW RUNNING CASING
Assessment Of Location Safety Meeting	07/31/2012 07:01							ASSESED LOCATION, SPOTTED EQUIPMENT, USED SPOTTERS
Pre-Rig Up Safety Meeting	07/31/2012 07:15							PRE RIG UP SAFETY MEETING DISCUSSED PINCH POINTS,EYES ON PATH, LINE OF FIRE, WATCH RUTS IN GROUND

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Rig-Up Equipment	07/31/2012 07:30							RIG UP DISCHARGE LINES, SUCTION LINES, DRY PRODUCT LINE
Other	07/31/2012 08:30							RIGGED UP TO RED ZONE
Casing on Bottom	07/31/2012 14:00							CASING ON BOTTOM, CASING CREW BEGINS RIGGING DOWN THEIR EQUIPMENT
Other	07/31/2012 14:45							PICK UP STAND PIPE, CONNECT CIRCULATING IRON TO STAND PIPE, CONNECT PLUG CONTAINER TO CASING
Safety Meeting	07/31/2012 15:00							DISCUSSED JOB PROCEDURE, RATES AND PRESSURES, MUSTER AREA, HEAD COUNT, CAUTION AROUND OUR IRON WHILE RUNNING JOB
Test Lines	07/31/2012 15:27						3000. 0	TEST LINES @ 3000 PSI
Pump Cement	07/31/2012 15:39		5		46		250.0	PUMP 46 BBLS OF TAIL CMT @ 15.6 PPG, 259 FT3, 1.18 FT3/SK, 5.2 GAL/SK
Drop Top Plug	07/31/2012 15:50							SHUTDOWN DROP PLUG
Pump Displacement	07/31/2012 15:51		5.5		203		25.0	PUMP 203 BBLS OF F/W DISPLACEMENT, 1st 10 BBLS OF DISPLACEMENT WASH UP ON PLUG
Displ Reached Cmmt	07/31/2012 16:03		5		203		50.0	DISPLACEMENT REACHED CMT 90 BBLS OUT
Slow Rate	07/31/2012 16:28		3		203		1000. 0	SLOWED DOWN RATE 190 BBLS OUT ON DISPLACEMENT TO BUMP PLUG
Bump Plug	07/31/2012 16:31						1600. 0	BUMP PLUG

Cementing Job Log

Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Check Floats	07/31/2012 16:35							CHECKED FLOATS, 1.5 BBL BACK, FLOATS DID NOT HOLD, COMPANY MAN DECIDED TO SHUT FOR 8 HRS
Other	07/31/2012 16:36							PUMP JOB COMPLETE
Post-Job Safety Meeting (Pre Rig-Down)	07/31/2012 16:37							DISCUSSED EYES ON PATH, LINE OF FIRE, PINCH POINTS, RUTS IN GROUND
Rig-Down Equipment	07/31/2012 16:40							RIG DOWN EQUIPMENT, DISCHARGE LINES, SUCTION LINES, CIRCULATING IRON, PLUG CONTAINER
Pre-Convoy Safety Meeting	07/31/2012 18:30							DISCUSSED ROUTE OF TRAVEL, WILDLIFE, NIGHT DRIVING, TRAFFIC
Depart Location for Service Center or Other Site	07/31/2012 18:45							DEPARTED LOCATION, NOTIFIED DISPATCH, JOURNEY MANAGEMENT
Other	07/31/2012 18:46							THANK YOU FOR USING HALLIBURTON ENERGY SERVICES, EDUR AND CREW

Work Order Contract

Order Number

9701327

TO: HALLIBURTON ENERGY SERVICES, INC. - YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICE PERSONNEL TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO CUSTOMER LISTED BELOW AND DELIVER AND SELL PRODUCTS, SUPPLIES AND MATERIALS FOR THE PURPOSE OF SERVICING:

Well No.	Farm or Lease	County	State	Well Permit Number
2	Jasper 12H	Lane	Kansas	
Customer		Well Owner	Job Purpose	
ENCANA OIL & GAS (USA) INC. - EBUS			Cement Intermediate Casing	

THIS WORK ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

A. CUSTOMER REPRESENTATION - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton Energy Services, Inc. (hereinafter "Halliburton").

B. PRICE AND PAYMENT - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices of Halliburton are exclusive of any federal, state or municipal taxes which may be imposed on the sale or use of any materials, products or supplies furnished or services performed. Customer agrees to pay such taxes in addition to the prices in Halliburton's price list. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, or Halliburton's actual attorney fees, whichever is greater, plus all collection and court costs. Customer agrees that the amount of attorney fees set out herein are reasonable and necessary.

C. RELEASE AND INDEMNITY - Customer agrees to RELEASE Halliburton Group from any and all liability for any and all damages whatsoever to property of any kind owned by, in the possession of, or leased by Customer and those persons and entities Customer has the ability to bind by contract or which are co-interest owners or joint ventures with Customer. Customer also agrees to DEFEND, INDEMNIFY, AND HOLD Halliburton Group HARMLESS from and against any and all liability, claims, costs, expenses, attorney fees and damages whatsoever for personal injury, illness, death, property damage and loss resulting from loss of well control, services to control a wild well whether underground or above the surface, reservoir or underground damage, including loss of oil, gas, other mineral substances or water, surface damage arising from underground damage, damage to or loss of the well bore, subsurface trespass or any action in the nature thereof, fire, explosion, subsurface pressure, radioactivity, and pollution and contamination and its cleanup and control.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations will apply even if the liability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of one or more members of the Halliburton Group, the unseaworthiness of any vessel or any defect in the data, products, supplies, materials or equipment furnished by any member or members of the Halliburton Group whether in the design, manufacture, maintenance or marketing thereof or from a failure to warn of such defect. "Halliburton Group" is defined as Halliburton Energy Services, Inc., its parent, subsidiary, and affiliated companies, insurers and subcontractors and all its/their officers, directors, employees, consultants and agents. Customer's RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations apply whether the personal injury, illness, death, property damage or loss is suffered by one or more members of the Halliburton Group, Customer, or any other person or entity. Customer agrees to support such obligations assumed herein with liability insurance with limits of not less than \$500,000. Customer agrees to name Halliburton Group as named additional insured on all of its general liability policy(s). Customer agrees that its liability under this Contract is not limited by the amounts of its insurance coverage, except where and as may be required by applicable local law for the provisions of this Contract to be enforceable.

D. EQUIPMENT LIABILITY - Customer shall at its risk and expense attempt to recover any Halliburton Group equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the current published replacement rate, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton Group. Customer shall be responsible for damage to or loss of Halliburton group equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton group equipment damaged by corrosion or abrasion due to well effluents.

E. LIMITED WARRANTY - Halliburton warrants only title to the equipment, products, and materials supplied under this Contract and that same are free from defects in workmanship and materials for thirty (30) days from the date of delivery. **THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE.** Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, **HALLIBURTON IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON GROUP.** Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton Group shall not be liable for and **CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such is contributed to or caused by the active or passive negligence, fault or strict liability of any member or members of Halliburton Group.** Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. GOVERNING LAW - The validity, interpretation and construction of this Contract shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.

G. DISPUTE RESOLUTION Except for Halliburton's statutory rights with regard to collection of past due invoices for services or materials, including the Contractor's statutory rights for perfection and enforcement of mechanics' and materialmen's liens, Customer and Halliburton agree that any dispute that may arise out of the performance of this Contract shall be resolved by binding arbitration by a panel of three arbitrators under the rules of the American Arbitration Association. The arbitration will take place in Houston, TX.

H. SEVERABILITY - If any provision or part thereof of this Contract shall be held to be invalid, void, or of no effect for any reason, such holding shall not be deemed to affect the validity of the remaining provisions of this Contract which can be given effect, without the invalid provision or part thereof, and to this end, the provisions of this Contract are declared to be severable. Customer and Halliburton agree that any provision of this Contract that is unenforceable or void under applicable law will be modified to achieve the intent of the parties hereunder to the greatest extent allowed by applicable law.

I. MODIFICATIONS - Customer agrees that Halliburton shall not be bound by any modifications to this Contract, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President - Legal, 10200 Bellaire Blvd, Houston, TX 77072-5299.

I HAVE READ AND UNDERSTAND THIS WORK ORDER CONTRACT WHICH CONTAINS RELEASE AND INDEMNITY LANGUAGE WHICH CUSTOMER ACKNOWLEDGES IS CONSPICUOUS AND AFFORDS FAIR AND ADEQUATE NOTICE AND I REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT. I AM SIGNING THIS WORK ORDER CONTRACT WITH THE UNDERSTANDING THAT ITS TERMS AND CONDITIONS WILL NOT APPLY TO THE EXTENT THEY CONFLICT WITH TERMS AND CONDITIONS OF A SIGNED MASTER SERVICE CONTRACT BETWEEN THE PARTIES.

Customer Acceptance of Terms and Conditions, Materials and Services



CUSTOMER Authorized Signatory

Date

Sold To #: 340078		Ship To #: 2936581		Quote #:		Sales Order #: 9734642	
Customer: ENCANA OIL & GAS (USA) INC. - EBUS				Customer Rep: Dean, TJ			
Well Name: Jasper 12H			Well #: 2			API/UWI #:	
Field:		City (SAP): DIGHTON		County/Parish: Lane		State: Kansas	
Legal Description: Section 12 Township 20S Range 29W							
Contractor: Precision			Rig/Platform Name/Num: 207				
Job Purpose: Cement Production Liner							
Well Type: Development Well			Job Type: Cement Production Liner				
Sales Person: DAIGLE, COLTER			Srvc Supervisor: RODRIGUEZ, EDGAR			MBU ID Emp #: 442125	

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CLEMENS, ANTHONY Jason	10	198516	JOURNAGEN, MICHAEL	10		MCKINLEY, MARK	8	
RODRIGUEZ, EDGAR Alejandro	10	442125	TORRES, CLEMENTE	10	344233			

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
8/15/2012	10	3.5						
TOTAL						<i>Total is the sum of each column separately</i>		

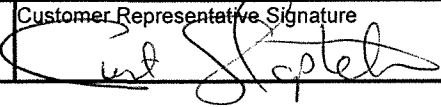
Formation Name					Date				Time	Time Zone
Formation Depth (MD)	Top		Bottom		Called Out	14 - Aug - 2012	19:30	CST		
Form Type		BHST			On Location	14 - Aug - 2012	22:30	CST		
Job depth MD	8941. ft	Job Depth TVD	8937. ft		Job Started	15 - Aug - 2012	08:16	CST		
Water Depth		Wk Ht Above Floor	6. ft		Job Completed	15 - Aug - 2012	09:54	CST		
Perforation Depth (MD)	From		To		Departed Loc	15 - Aug - 2012	11:20	CST		

Well Data											
Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Intermediate Open Hole				8.75				2132.	5660.	.	.
Production Liner Open Hole				6.125				5660.	9221.	4692.	5068.
Intermediate Casing	Unknown		7.	6.366	23.		N-80	.	5660.	.	4692.
Drill Pipe	New		3.5	2.992	10.2	Unknown		.	5360.	.	.

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Stage/Plug #:	1
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Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft ³ /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Rig Water		60.00	bbl	8.33	.0	.0	.0	
2	EconoCem	ECONOCHEM (TM) SYSTEM (452992)	435.0	sacks	13.6	1.53	7.41		7.41
	0.4 %	HALAD(R)-9, 50 LB (100001617)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	2 %	BENTONITE, BULK (100003682)							
	7.41 Gal	FRESH WATER							
3	Displacement (TBC)		107.00	bbl	8.33	.0	.0	.0	
Calculated Values		Pressures		Volumes					
Displacement	107	Shut In: Instant		Lost Returns		Cement Slurry	119	Pad	
Top Of Cement	1926	5 Min		Cement Returns		Actual Displacement	107	Treatment	
Frac Gradient		15 Min		Spacers	10	Load and Breakdown		Total Job	236
Rates									
Circulating	5	Mixing	5	Displacement	5	Avg. Job	5		
Cement Left In Pipe	Amount	86.14 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature 					

The Road to Excellence Starts with Safety

Sold To #: 340078		Ship To #: 2936581		Quote #:		Sales Order #: 9734642	
Customer: ENCANA OIL & GAS (USA) INC. - EBUS				Customer Rep: Dean, TJ			
Well Name: Jasper 12H			Well #: 2		API/UWI #:		
Field:		City (SAP): DIGHTON		County/Parish: Lane		State: Kansas	
Legal Description: Section 12 Township 20S Range 29W							
Lat:				Long:			
Contractor: Precision			Rig/Platform Name/Num: 207				
Job Purpose: Cement Production Liner						Ticket Amount:	
Well Type: Development Well			Job Type: Cement Production Liner				
Sales Person: DAIGLE, COLTER			Srv Supervisor: RODRIGUEZ, EDGAR			MBU ID Emp #: 442125	

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	08/14/2012 19:30							DISPATCH CALLED CEMENT CREW OUT FOR JOB. SANDRIDGE ENERGY SUTTON #1-9H 4 1/2 PRODUCTION LINER CASING
Other	08/14/2012 20:00							LOAD EQUIPMENT
Depart Yard Safety Meeting	08/14/2012 20:30							DISCUSSED ALL ROUTES TO TAKE AND THE POSSIBLE HAZARDS ON THE ROAD. DISCUSSED ALL PLANNED STOPS.
Crew Leave Yard	08/14/2012 20:40							
Arrive At Loc	08/14/2012 22:40							
Assessment Of Location Safety Meeting	08/14/2012 22:45							GETTING READY TO RUN DRILL PIPE. GOT NUMBERS FROM CUSTOMER REP. TP LINER= 4 1/2 #11.6 P-110 4338' DP=3 1/2 15.5# 4529' 6 1/8 @8867 SJ=92
Pre-Rig Up Safety Meeting	08/14/2012 22:50							
Rig-Up Equipment	08/14/2012 23:00							
Rig-Up Completed	08/15/2012 00:00							
Wait on Customer or Customer Sub-Contractor Equip	08/15/2012 00:02							RUNNING DRILL PIPE
Activity Description	Date/Time	Cht	Rate bbl/min	Volume bbl		Pressure psig		Comments

Sold To #: 340078

Ship To #: 2936581

Quote #:

Sales Order #:

9734642

SUMMIT Version: 7.3.0039

Wednesday, August 15, 2012 11:20:00

		#		Stage	Total	Tubing	Casing	
Other	08/15/2012 06:55							DRILL PIPE ON BOTTOM. WILL RIG UP COMPETITION HEAD MANIFOLD AND CIRCULATE THROUGH IT.
Rig-Up Equipment	08/15/2012 07:45							RIG UP IRON ON FLOOR.
Pre-Job Safety Meeting	08/15/2012 08:00							DISCUSSED HAZARDS, JOB STEPS WITH ALL ON LOCATION. WENT OVER NUMBERS, PUMPING RATES, AND PRESSURES WITH CUSTOMER REP. HAD EVERYBODY INVOLVED SIGN HES SAFETY SHEET.
Start Job	08/15/2012 08:16							
Test Lines	08/15/2012 08:16						5000. 0	PRESSURE TEST TO 5000 PSI.
Pump Water	08/15/2012 08:22		5	79			2997. 0	PUMP TO SHEAR PLUG. WILL SHUTDOWN WHEN PRESSURE IS @2900 PSI
Shutdown	08/15/2012 08:46							TOOLMAN WILL STING OUT TO TEST
Other	08/15/2012 08:48							STING OUT
Pump Water	08/15/2012 08:51		2.5	10	89		2833. 0	SHEARED PLUG @2833 PSI
Pump Spacer 1	08/15/2012 08:56		5	10			403.0	FRESH WATER
Pump Cement	08/15/2012 08:58		5	119			367.0	435 SKS 50/50 POZ STAND. CMT @13.6 (119 BBLS)
Shutdown	08/15/2012 09:21							
Clean Lines	08/15/2012 09:23							
Drop Plug	08/15/2012 09:26							COMPETITION PLUG
Pump Displacement	08/15/2012 09:27		6	45	45		187.0	FRESH WATER
Activity Description	Date/Time	Cht #	Rate bbl/ min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	

HALLIBURTON

Cementing Job Log

Slow Rate	08/15/2012 09:35		2.5	10	55		282.0	SLOW DOWN TO LET PLUG PASS THROUGH TOOL. PRESSURE WHEN IT PASSED WAS 1150 PSI. @41 BBLs GONE
Pump Displacement	08/15/2012 09:37		5	22	77		1062. 0	CONTINUE AT NORMAL RATE
Slow Rate	08/15/2012 09:46		2	20	97		639.0	SLOW TO 3 BPM TO BUMP PLUG
Bump Plug	08/15/2012 09:52		2	10	107		989.0	BUMP PLUG 1000 PSI OVER. FINAL PRESSURE WAS 2240 PSI
Check Floats	08/15/2012 09:53							FLOATS HELD. 1 BBL BACK
End Job	08/15/2012 09:54							
Pre-Rig Down Safety Meeting	08/15/2012 09:55							DISCUSSED ALL RED ZONES. PROPER LIFTING. SPOTTING EQUIPMENT OUT OF LOCATION
Rig-Down Equipment	08/15/2012 10:05							
Rig-Down Completed	08/15/2012 11:05							
Depart Location Safety Meeting	08/15/2012 11:10							DISCUSSED ALL ROUTES AND POTENTIAL HAZARDS ON THE WAY BACK TO THE YARD.
Crew Leave Location	08/15/2012 11:20							THANK YOU EDGAR A. RODRIGUEZ AND HALLIBURTON CREW.

Work Order Contract

Order Number

9734642

TO: HALLIBURTON ENERGY SERVICES, INC. - YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICE PERSONNEL TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO CUSTOMER LISTED BELOW AND DELIVER AND SELL PRODUCTS, SUPPLIES AND MATERIALS FOR THE PURPOSE OF SERVICING:

Well No. 2	Farm or Lease Jasper 12H	County Lane	State Kansas	Well Permit Number
Customer ENCANA OIL & GAS (USA) INC. - EBUS		Well Owner		Job Purpose Cement Production Liner

THIS WORK ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED

A. CUSTOMER REPRESENTATION - Customer warrants that the well is in proper condition to receive the services, equipment, products, and materials to be supplied by Halliburton Energy Services, Inc. (hereinafter "Halliburton").

B. PRICE AND PAYMENT - The services, equipment, products, and/or materials to be supplied hereunder are priced in accordance with Halliburton's current price list. All prices of Halliburton are exclusive of any federal, state or municipal taxes which may be imposed on the sale or use of any materials, products or supplies furnished or services performed. Customer agrees to pay such taxes in addition to the prices in Halliburton's price list. If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If Customer has an approved open account, invoices are payable on the twentieth day after the date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, or Halliburton's actual attorney fees, whichever is greater, plus all collection and court costs. Customer agrees that the amount of attorney fees set out herein are reasonable and necessary.

C. RELEASE AND INDEMNITY - Customer agrees to RELEASE Halliburton Group from any and all liability for any and all damages whatsoever to property of any kind owned by, in the possession of, or leased by Customer and those persons and entities Customer has the ability to bind by contract or which are co-interest owners or joint ventures with Customer. Customer also agrees to DEFEND, INDEMNIFY, AND HOLD Halliburton Group HARMLESS from and against any and all liability, claims, costs, expenses, attorney fees and damages whatsoever for personal injury, illness, death, property damage and loss resulting from loss of well control; services to control a wild well whether underground or above the surface; reservoir or underground damage, including loss of oil, gas, other mineral substances or water; surface damage arising from underground damage; damage to or loss of the well bore; subsurface trespass or any action in the nature thereof; fire; explosion; subsurface pressure; radioactivity; and pollution and contamination and its cleanup and control.

CUSTOMER'S RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations will apply even if the liability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of one or more members of the Halliburton Group, the unseaworthiness of any vessel or any defect in the data, products, supplies, materials or equipment furnished by any member or members of the Halliburton Group whether in the design, manufacture, maintenance or marketing thereof or from a failure to warn of such defect. "Halliburton Group" is defined as Halliburton Energy Services, Inc., its parent, subsidiary, and affiliated companies, insurers and subcontractors and all its/their officers, directors, employees, consultants and agents. Customer's RELEASE, DEFENSE, INDEMNITY AND HOLD HARMLESS obligations apply whether the personal injury, illness, death, property damage or loss is suffered by one or more members of the Halliburton Group, Customer, or any other person or entity. Customer agrees to support such obligations assumed herein with liability insurance with limits of not less than \$500,000. Customer agrees to name Halliburton Group as named additional insured on all of its general liability policy(s). Customer agrees that its liability under this Contract is not limited by the amounts of its insurance coverage, except where and as may be required by applicable local law for the provisions of this Contract to be enforceable.

D. EQUIPMENT LIABILITY - Customer shall at its risk and expense attempt to recover any Halliburton Group equipment lost or lodged in the well. If the equipment is recovered and repairable, Customer shall pay the repair costs, unless caused by Halliburton's sole negligence. If the equipment is not recovered or is irreparable, Customer shall pay the current published replacement rate, unless caused by Halliburton's sole negligence. If a radioactive source becomes lost or lodged in the well, Customer shall meet all requirements of Section 39.15(a) of the Nuclear Regulatory Commission regulations and any other applicable laws or regulations concerning retrieval or abandonment and shall permit Halliburton to monitor the recovery or abandonment efforts all at no risk or liability to Halliburton Group. Customer shall be responsible for damage to or loss of Halliburton group equipment, products, and materials while in transit aboard Customer-supplied transportation, even if such is arranged by Halliburton at Customer's request, and during loading and unloading from such transport. Customer will also pay for the repair or replacement of Halliburton group equipment damaged by corrosion or abrasion due to well effluents.

E. LIMITED WARRANTY - Halliburton warrants only title to the equipment, products, and materials supplied under this Contract and that same are free from defects in workmanship and materials for thirty (30) days from the date of delivery. **THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE.** Halliburton's sole liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale, lease or use of any equipment, products, or materials is expressly limited to the replacement of such on their return to Halliburton or, at Halliburton's option, to the allowance to Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, consequential, or punitive damages. Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, **HALLIBURTON IS UNABLE TO GUARANTEE THE EFFECTIVENESS OF THE EQUIPMENT, MATERIALS, OR SERVICE, NOR THE ACCURACY OF ANY CHART INTERPRETATION, RESEARCH ANALYSIS, JOB RECOMMENDATION OR OTHER DATA FURNISHED BY HALLIBURTON GROUP.** Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton Group shall not be liable for and **CUSTOMER SHALL INDEMNIFY HALLIBURTON GROUP AGAINST ANY DAMAGES ARISING FROM THE USE OF SUCH INFORMATION, even if such is contributed to or caused by the active or passive negligence, fault or strict liability of any member or members of Halliburton Group.** Halliburton also does not warrant the accuracy of data transmitted by electronic process, and Halliburton will not be responsible for accidental or intentional interception of such data by third parties.

F. GOVERNING LAW - The validity, interpretation and construction of this Contract shall be determined by the laws of the jurisdiction where the services are performed or the equipment or materials are delivered.


G. DISPUTE RESOLUTION Except for Halliburton's statutory rights with regard to collection of past due invoices for services or materials, including the Contractor's statutory rights for perfection and enforcement of mechanics' and materialmen's liens, Customer and Halliburton agree that any dispute that may arise out of the performance of this Contract shall be resolved by binding arbitration by a panel of three arbitrators under the rules of the American Arbitration Association. The arbitration will take place in Houston, TX.

H. SEVERABILITY - If any provision or part thereof of this Contract shall be held to be invalid, void, or of no effect for any reason, such holding shall not be deemed to affect the validity of the remaining provisions of this Contract which can be given effect, without the invalid provision or part thereof, and to this end, the provisions of this Contract are declared to be severable. Customer and Halliburton agree that any provision of this Contract that is unenforceable or void under applicable law will be modified to achieve the intent of the parties hereunder to the greatest extent allowed by applicable law.

I. MODIFICATIONS - Customer agrees that Halliburton shall not be bound by any modifications to this Contract, except where such modification is made in writing by a duly authorized executive officer of Halliburton. Requests for modifications should be directed to the Vice President - Legal, 10200 Bellaire Blvd, Houston, TX 77072-5299.

I HAVE READ AND UNDERSTAND THIS WORK ORDER CONTRACT WHICH CONTAINS RELEASE AND INDEMNITY LANGUAGE WHICH CUSTOMER ACKNOWLEDGES IS CONSPICUOUS AND AFFORDS FAIR AND ADEQUATE NOTICE AND I REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT. I AM SIGNING THIS WORK ORDER CONTRACT WITH THE UNDERSTANDING THAT ITS TERMS AND CONDITIONS WILL NOT APPLY TO THE EXTENT THEY CONFLICT WITH TERMS AND CONDITIONS OF A SIGNED MASTER SERVICE CONTRACT BETWEEN THE PARTIES.

Customer Acceptance of Terms and Conditions, Materials and Services


CUSTOMER Authorized Signatory

8/14/2012
Date

Encana Natural Gas

Lane County, Kansas

API: 15101223810100

Final Survey is a projection to bit

MD	INC	AZI	TVD	N/S	E/W	VS	DLS
74.28	0.98	13.64	74.28	0.62	0.15	0.62	1.32
162.92	0.97	32.81	162.9	1.98	0.74	2	0.37
251.56	0.95	25.31	251.53	3.28	1.46	3.3	0.14
340.2	0.65	92.2	340.16	3.92	2.27	3.96	1.03
428.84	0.49	115.39	428.8	3.74	3.12	3.79	0.31
517.48	0.47	314.67	517.44	3.84	3.2	3.89	1.07
606.12	0.2	248.83	606.08	4.04	2.8	4.08	0.48
694.76	0.83	191.56	694.71	3.35	2.53	3.39	0.84
783.4	0.34	200.5	783.35	2.48	2.3	2.51	0.56
872.04	0.57	81.84	871.99	2.29	2.65	2.33	0.89
960.68	0.72	198.18	960.62	1.82	2.91	1.87	1.24
1049.32	0.71	265.82	1049.26	1.26	2.19	1.29	0.9
1137.96	0.69	153.56	1137.9	0.74	1.88	0.77	1.31
1226.6	0.96	331.2	1226.53	0.91	1.76	0.94	1.86
1315.24	0.59	292.62	1315.16	1.74	0.98	1.75	0.7
1403.88	0.5	336.82	1403.8	2.27	0.41	2.27	0.47
1492.52	0.56	297.21	1492.44	2.82	-0.13	2.82	0.41
1581.16	0.3	270.57	1581.07	3.02	-0.75	3.01	0.36
1669.8	0.63	276.71	1669.71	3.08	-1.46	3.06	0.38
1758.44	2.84	278.36	1758.31	3.46	-4.12	3.39	2.49
1847.08	4.2	270.86	1846.78	3.83	-9.54	3.68	1.62
1935.72	3.21	301.1	1935.24	5.16	-14.91	4.92	2.43
2024.36	2.97	303.1	2023.75	7.69	-18.96	7.39	0.3
2113	2.84	306.74	2112.28	10.26	-22.64	9.9	0.25
2199	4.57	9.69	2198.12	14.91	-23.77	14.54	4.81
2244	4.63	8.23	2242.98	18.48	-23.21	18.11	0.29
2289	4.5	7.34	2287.84	22.02	-22.73	21.66	0.32
2334	4.35	3.16	2332.7	25.48	-22.41	25.13	0.79
2379	4.09	359.43	2377.58	28.79	-22.33	28.44	0.85
2424	3.48	355.93	2422.48	31.76	-22.44	31.4	1.44
2468	2.87	350.2	2466.41	34.17	-22.72	33.81	1.56
2513	2.1	350.57	2511.37	36.1	-23.05	35.73	1.73
2558	1.58	354.97	2556.35	37.53	-23.24	37.16	1.18
2648	1.8	351.76	2646.31	40.16	-23.55	39.79	0.26
2738	0.86	312.34	2736.29	42.01	-24.25	41.63	1.39
2827	0.92	305.56	2825.27	42.88	-25.33	42.48	0.13
2917	1.05	300.51	2915.26	43.72	-26.63	43.29	0.17
3007	0.89	297.24	3005.25	44.46	-27.96	44.01	0.18
3097	0.97	306.94	3095.24	45.23	-29.19	44.77	0.19
3186	0.51	10.8	3184.23	46.07	-29.71	45.6	0.98
3276	0.2	121.88	3274.23	46.38	-29.51	45.91	0.68

3366	0.36	99.55	3364.23	46.25	-29.1	45.79	0.21
3456	0.48	115.06	3454.23	46.05	-28.48	45.6	0.18
3545	0.4	111.57	3543.22	45.78	-27.85	45.33	0.09
3635	0.47	101.2	3633.22	45.59	-27.2	45.16	0.12
3680	0.42	54.59	3678.22	45.65	-26.88	45.22	0.79
3725	2.3	21.54	3723.2	46.59	-26.42	46.17	4.37
3770	4.5	20.32	3768.12	49.08	-25.47	48.68	4.88
3815	7.14	27.9	3812.89	53.21	-23.55	52.83	6.11
3859	9.86	36.23	3856.4	58.67	-20.04	58.35	6.77
3904	13.65	34.34	3900.45	66.17	-14.76	65.93	8.46
3949	17.22	28.6	3943.82	76.4	-8.58	76.26	8.6
3994	20.82	23.9	3986.36	89.56	-2.15	89.52	8.69
4039	24.6	19.17	4027.87	105.73	4.17	105.78	9.33
4084	28.77	16.64	4068.07	124.96	10.35	125.11	9.6
4129	33.15	13.54	4106.65	147.31	16.33	147.55	10.37
4173	37.01	8.19	4142.66	172.13	21.04	172.44	11.2
4218	38.88	3.52	4178.15	199.64	23.84	199.99	7.61
4263	39.56	358.4	4213.03	228.07	24.3	228.42	7.35
4308	42.08	356.05	4247.08	257.44	22.87	257.77	6.56
4353	44.88	356.04	4279.73	288.33	20.73	288.62	6.21
4398	47.64	356	4310.84	320.76	18.48	321.01	6.13
4443	50.07	356.76	4340.45	354.57	16.34	354.78	5.55
4487	52.64	357.6	4367.93	388.89	14.66	389.07	6.03
4532	54.85	358.67	4394.54	425.16	13.48	425.32	5.27
4577	57.08	359.12	4419.72	462.44	12.76	462.58	5.03
4622	57.99	358.76	4443.88	500.4	12.06	500.53	2.12
4667	58.47	358.69	4467.57	538.64	11.21	538.75	1.08
4712	58.99	358.15	4490.93	577.09	10.14	577.18	1.54
4757	59.42	358.2	4513.97	615.73	8.91	615.79	0.96
4802	59.81	357.95	4536.74	654.52	7.61	654.56	0.99
4846	60.26	357.79	4558.71	692.61	6.19	692.63	1.07
4891	60.57	357.56	4580.93	731.71	4.6	731.7	0.82
4936	60.85	357.13	4602.95	770.92	2.78	770.87	1.05
4981	61.31	357.03	4624.7	810.26	0.77	810.17	1.04
5026	63	357.96	4646.14	849.77	-1.31	849.64	1.04
5071	65.64	359.79	4665.22	890.55	-1.75	890.41	6.92
5116	69.23	1.35	4682.48	932.1	-1.33	931.96	8.59
5160	73.22	2.14	4696.64	973.73	-0.06	973.61	9.21
5205	76.47	3.3	4708.4	1017.11	2.01	1017.01	7.65
5250	79.94	3.77	4717.6	1061.07	4.73	1061.01	7.78
5295	82.57	3.66	4724.44	1105.45	7.61	1105.43	5.85
5310	83.32	3.43	4726.28	1120.3	8.53	1120.3	5.2
5399	86.7	4.42	4734.03	1208.74	14.6	1208.82	3.95
5431	86.22	2.92	4736	1240.62	16.64	1240.72	4.9
5461	87.25	3.03	4737.71	1270.53	18.2	1270.66	3.45
5492	88.45	3.62	4738.88	1301.45	20	1301.61	4.34
5523	91.39	4.32	4738.92	1332.37	22.14	1332.56	9.72

5554	93.39	5.23	4737.63	1363.24	24.72	1363.46	7.1
5584	94.39	5.06	4735.59	1393.05	27.4	1393.31	3.37
5615	93.52	4.15	4733.45	1423.87	29.88	1424.17	4.07
5646	93.27	1.9	4731.62	1454.77	31.52	1455.09	7.29
5676	93.02	2.39	4729.97	1484.71	32.64	1485.04	1.85
5707	93.15	2.14	4728.3	1515.64	33.86	1515.98	0.91
5738	91.82	1.24	4726.96	1546.6	34.77	1546.95	5.19
5768	91.94	0.29	4725.98	1576.58	35.17	1576.93	3.18
5799	91.73	359.92	4724.99	1607.56	35.23	1607.92	1.4
5830	91.14	359.17	4724.21	1638.55	34.98	1638.9	3.06
5922	91.32	358.18	4722.23	1730.5	32.86	1730.8	1.09
6014	92.35	357.99	4719.29	1822.4	29.79	1822.65	1.13
6106	91.73	357.5	4716.01	1914.27	26.18	1914.45	0.86
6198	92.04	359.68	4712.99	2006.19	23.91	2006.32	2.39
6290	91.91	358.66	4709.82	2098.12	22.58	2098.22	1.12
6383	85.84	356.62	4711.65	2190.98	18.76	2191	6.88
6478	87.62	358.22	4717.07	2285.72	14.5	2285.67	2.52
6573	87.72	357.45	4720.93	2380.57	10.92	2380.45	0.82
6668	87.97	0.19	4724.51	2475.48	8.97	2475.31	2.89
6763	88.25	0.54	4727.64	2570.42	9.58	2570.26	0.48
6842	88.89	0.61	4729.61	2649.4	10.38	2649.23	0.81
6937	89.72	0.8	4730.77	2744.38	11.55	2744.22	0.9
7032	94.36	1.64	4727.39	2839.27	13.56	2839.13	4.96
7127	88.8	1.13	4724.78	2934.17	15.86	2934.06	5.88
7222	89.17	0.15	4726.46	3029.15	16.92	3029.04	1.11
7317	89.29	358.92	4727.74	3124.13	16.15	3124	1.3
7412	87.04	0.01	4730.79	3219.07	15.26	3218.92	2.63
7507	87.81	0.87	4735.06	3313.97	15.99	3313.82	1.22
7602	90.12	3.21	4736.77	3408.89	19.37	3408.77	3.46
7697	94.25	3.98	4733.15	3503.61	25.32	3503.57	4.42
7792	92.34	4.38	4727.69	3598.19	32.23	3598.26	2.05
7887	91.94	3.29	4724.15	3692.91	38.58	3693.06	1.21
7982	89.72	3.25	4722.77	3787.74	44	3787.97	2.34
8062	90.25	3.81	4722.79	3867.59	48.93	3867.88	0.96
8157	87.44	0.98	4724.71	3962.47	52.9	3962.81	4.19
8252	89.53	0.57	4727.22	4057.42	54.18	4057.77	2.25
8347	91.23	0.86	4726.58	4152.41	55.37	4152.77	1.82
8442	90.68	1.03	4725	4247.38	56.94	4247.75	0.61
8537	87.34	359.18	4726.64	4342.35	57.11	4342.71	4.01
8632	88.64	358.93	4729.96	4437.28	55.54	4437.6	1.39
8727	89.72	358.98	4731.32	4532.25	53.82	4532.54	1.13
8822	89.94	357.79	4731.6	4627.21	51.14	4627.44	1.28
8893	89.63	357.56	4731.87	4698.15	48.25	4698.33	0.54
8937	89.63	357.56	4732.15	4742.11	46.38	4742.25	0.01



Gamma Ray Rate of Penetration

1 : 1200

County		: Lane		Company				: Encana Natural Gas			
Field		: J-Mur		Rig				: Precision Drilling 207			
Location		: Lat: 38° 19' 20.21" North Long: 100° 28' 34.18" West		Well				: Jasper 12H-2			
Well		: Jasper 12H-2		Company				: Encana Natural Gas			
Rig		: Precision Drilling 207		API Number				: 15101223810100			
LOCATION		Latitude : 38 ° 19' 20.21 " North Longitude : 100 ° 28' 34.18 " West		Other Services Directional Drilling							
		UTM Easting = 1,433,093.71 ft UTM Northing = 608,851.21 ft									
Permanent Datum		: Ground Level		Elevation :		2812.00 ft		Elev.		KB N/A	
Log Measured From		: Drill Floor		14.50 ft		Above Permanent Datum		DF		2826.50 ft	
Drilling Measured From		: Drill Floor		MD LOG				GL		2812.00 ft	
								WD		N/A	
Depth Logged		: 2,123.00 ft To 8,937.00 ft		Unit No.		: PP 32		Job No.		:OK-MJ-0009688843	
Date Logged		: 24-Jul-12 To 12-Aug-12		Plot Type		: Final					
Total Depth MD		: 8,937.00 ft TVD : 4,732.15 ft		Plot Date		: 12-Aug-12					
Spud Date		: 21-Jul-12									
Run No.	Borehole Record (MD)			Run No.	Borehole Record (MD)						
	Size	From	To		Size	From	To				
1	8.750 in	2,123.00 ft	5,365.00 ft								
2	6.125 in	5,365.00 ft	6,848.00 ft								
3	6.125 in	6,848.00 ft	7,617.00 ft								
4	6.125 in	7,617.00 ft	8,075.00 ft								
5	6.125 in	8,075.00 ft	8,937.00 ft								
				Size	Casing Record (MD)	From	To				
				9.625 in	37.39 lbpf	SURFACE	2,123.00 ft				
				7.000 in	29.78 lbpf	SURFACE	5,365.00 ft				

WELL INFORMATION

MWD Run Number	100	200	300	400	500
Date run completed	30-Jul-12	05-Aug-12	08-Aug-12	09-Aug-12	12-Aug-12
Rig Bit Number	1	2	3	4	5
Bit Size (in)	8.750	6.125	6.125	6.125	6.125
Tool Nominal OD (in)	8.000	4.750	4.750	4.750	4.750
Log Start Depth (MD, ft)	2,123.00	5,365.00	6,848.00	7,617.00	8,075.00
Log End Depth (MD, ft)	5,365.00	6,848.00	7,617.00	8,075.00	8,937.00
Drill or Wipe	Drill	Drill	Drill	Drill	Drill
Drill/Wipe Start Date and Time	24-Jul-12 13:00	02-Aug-12 00:04	05-Aug-12 06:30	08-Aug-12 14:53	10-Aug-12 04:30
Drill/Wipe End Date and Time	30-Jul-12 05:30	04-Aug-12 14:00	06-Aug-12 16:45	09-Aug-12 05:30	11-Aug-12 06:10
Min Inc (deg) @ Depth (MD, ft)	.05 @ 2,917.00	86.22 @ 5,431.00	87.81 @ 7,507.00	89.72 @ 7,982.00	87.34 @ 8,537.00
Max Inc (deg) @ Depth (MD, ft)	83.32 @ 5,310.00	93.52 @ 5,615.00	94.36 @ 7,032.00	94.25 @ 7,697.00	91.23 @ 8,347.00
Bit TFA(in2) / Bit Type	.75 / PDC	.46 / PDC	.46 / PDC	.46 / PDC	.46 / PDC
Flow Rate (gpm)	500.00	250.00	250.00	250.00	250.00
Max AV (fpm) / CV (fpm) @ MWD	N/A / N/A	N/A / N/A	N/A / N/A	N/A / N/A	N/A / N/A
Fluid Type	Fresh Water Gel	Fresh Water Gel	Fresh Water Gel	Fresh Water Gel	Fresh Water Gel
Density (ppg) / Viscosity (spqt)	8.60 / 27.00	8.40 / 27.00	8.50 / 28.00	8.50 / 27.00	8.50 / 28.00
Filtrate CL (ppm)	1,200.00	800.00	800.00	900.00	1,200.00
pH / Fluid Loss (mptm)	8.00 / 90	10.50 / 90	9.50 / 90	9.50 / 90	9.50 / 90
PV (cP) / YP (lbf2)	1 / 4.00	1 / 4.00	1 / 4.00	1 / 4.00	2 / 3.00
% Solids / % Sand	9.70 / 0.01	0.50 / 0.01	1.30 / 0.01	9.80 / 0.01	1.10 / 0.01
% Oil / Oil:Water Ratio	N/A / N/A	N/A / N/A	N/A / N/A	/ N/A	N/A / N/A
Rm @ Measured Temp (degF)	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A
Rmf @ Measured Temp (degF)	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A
Rmc @ Measured Temp (degF)	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A	N/A @ N/A
Mud Weight (lbm / gal)	127.50 / PDC-B	151.00 / PDC-B	152.00 / PDC-B	150.00 / PDC-B	150.00 / PDC-B

Max Tool Temp (degF) / Source	137.50 / PCG-R	154.30 / PCG-R	158.60 / PCG-R	158.60 / PCG-R	158.00 / PCG-R
Rm @ Max Tool Temp (degF)	N/A @ 137.50	N/A @ 154.30	N/A @ 158.60	N/A @ 158.60	N/A @ 158.00
Lead MWD Engineer	Rob Starks	Rob Starks	Rob Starks	Rob Starks	Rob Starks
Customer Representative	Tye Snapp	Tye Snapp	Tye Snapp	Curt Stapleton	Curt Stapleton

SENSOR INFORMATION

Directional Sensor Information

Tool Type	PCD	PCD	PCD	PCD	PCD
Distance From Bit (ft)	51.90	42.53	43.48	41.77	41.77
Software Version	3.32	3.32	3.32	3.32	3.32
Sub Serial Number	11342290	11342290	11342290	11342290	11342290
Sonde Serial Number	10919455	11162900	10919455	11162900	10919455
Sensor ID Number	N/A	N/A	N/A	N/A	N/A
Toolface Offset (deg)	244.79	345.52	120.76	84.92	76.92

Gamma Ray Sensor Information

Tool Type	PCG	PCG	PCG	PCG	PCG
Distance From Bit (ft)	57.40	48.03	48.98	47.27	47.27
Recorded Sample Period (sec)	15	15	15	15	10
Software Version	8.11	8.11	8.11	8.11	8.11
Sub Serial Number	11342290	11342290	11342290	11342290	11342290
Insert/Sonde Serial Number	11062025	11062025	111458402	11062025	11458402

REMARKS

1. All depths are calibrated to the driller's pipe tally, and measured from the drill floor.
2. No depth correction has been made for pipe stretch or compression.
3. All data presented is recorded (memory data) unless otherwise stated.
4. The following smoothing parameters have been applied to data:

ROP: Interval Resolution: 1.0 ft
Coercion Distance: 3.3 ft

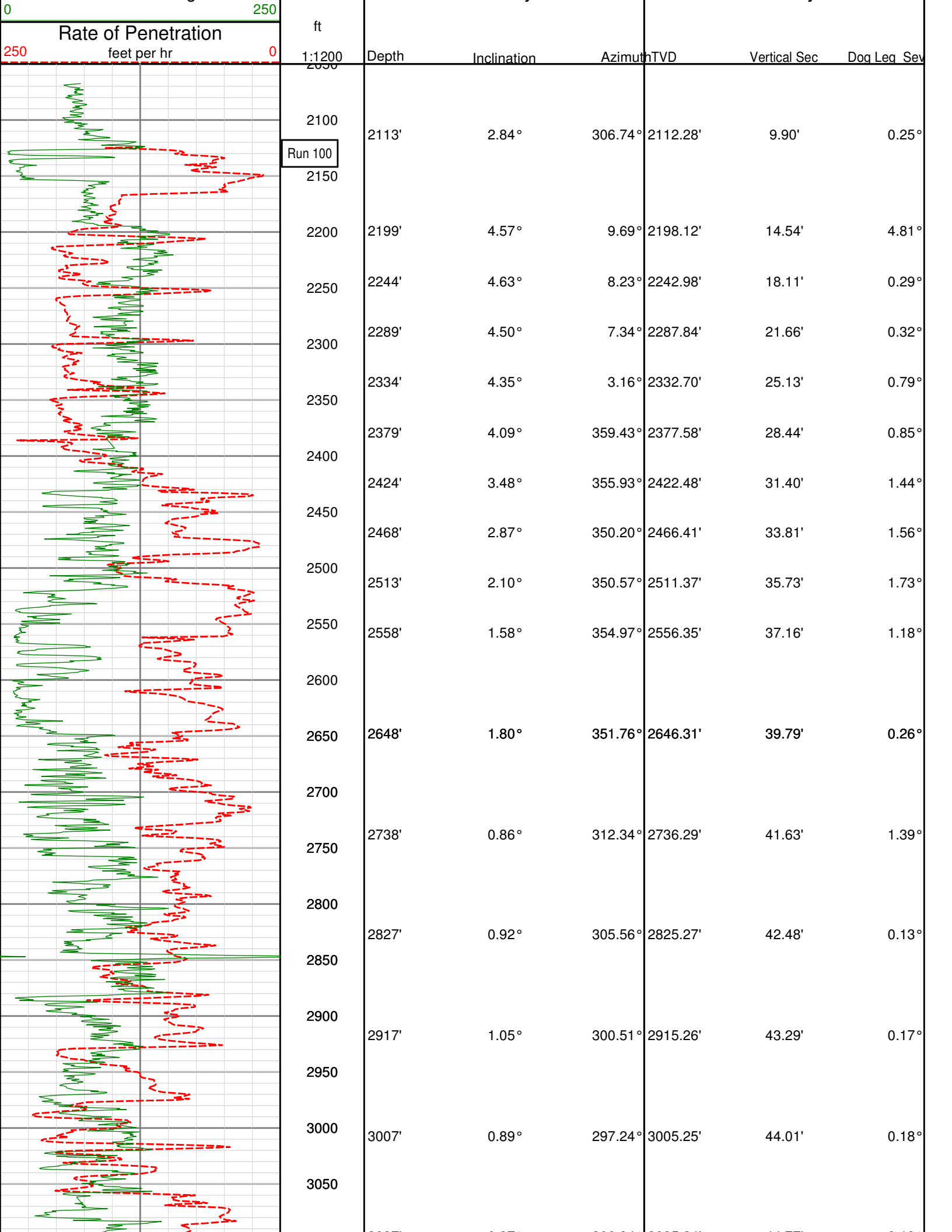
Gap Fill: 5.0 ft

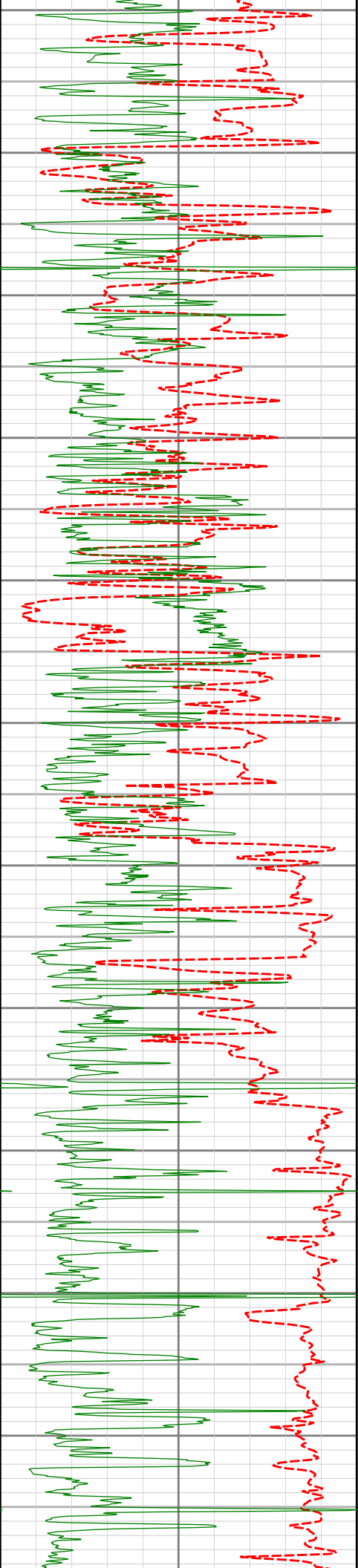
All Other Curves: Interval Resolution: 0.5 ft
Coercion Distance: 0.5 ft
Gap Fill: 5.0 ft

WARRANTY

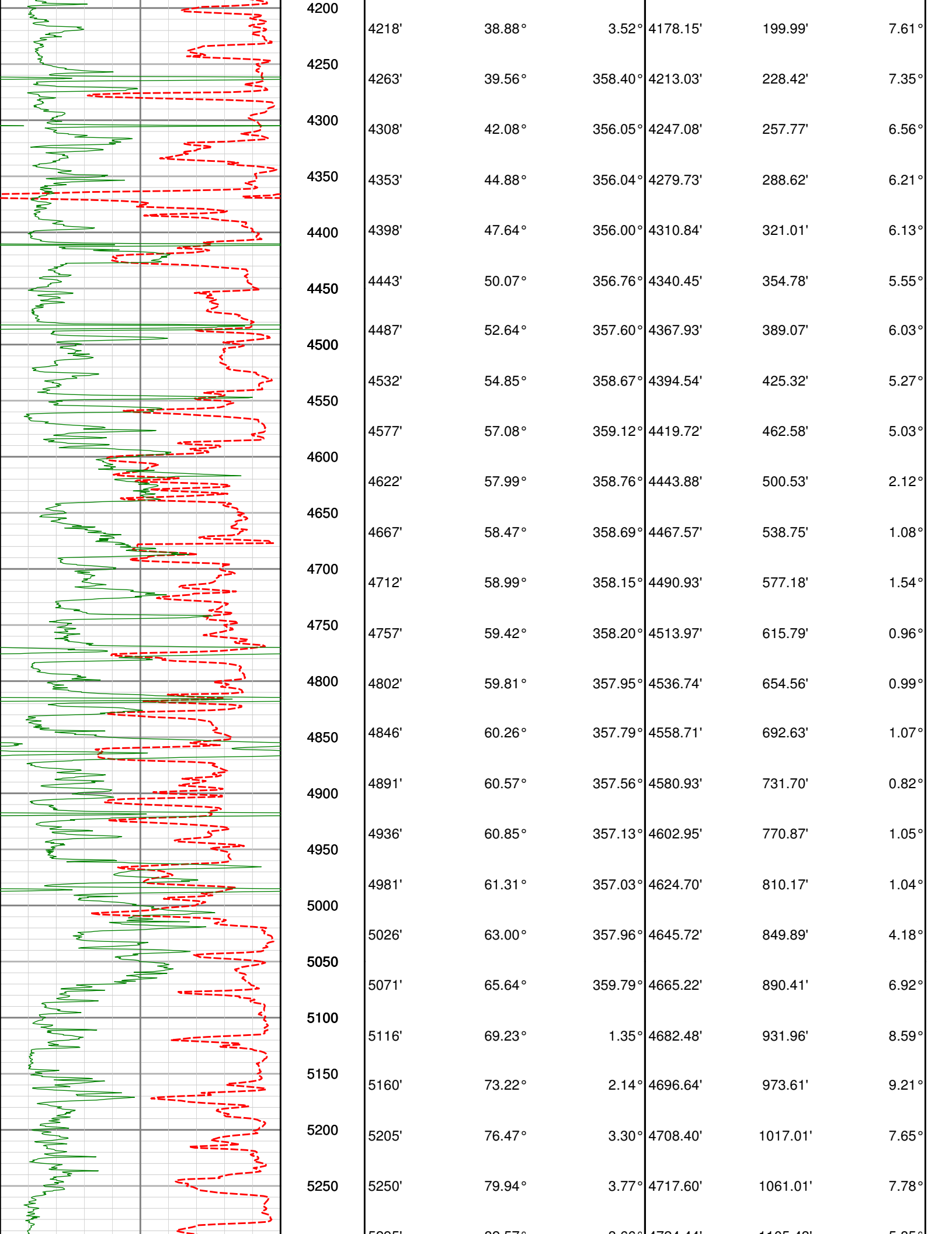
HALLIBURTON WILL USE ITS BEST EFFORTS TO FURNISH CUSTOMERS WITH ACCURATE INFORMATION AND INTERPRETATIONS THAT ARE PART OF, AND INCIDENT TO, THE SERVICES PROVIDED. HOWEVER, HALLIBURTON CANNOT AND DOES NOT WARRANT THE ACCURACY OR CORRECTNESS OF SUCH INFORMATION AND INTERPRETATIONS. UNDER NO CIRCUMSTANCES SHOULD ANY SUCH INFORMATION OR INTERPRETATION BE RELIED UPON AS THE SOLE BASIS FOR ANY DRILLING, COMPLETION, PRODUCTION, OR FINANCIAL DECISION OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING VENTURE, DRILLING RIG OR ITS CREW OR ANY OTHER THIRD PARTY. THE CUSTOMER HAS FULL RESPONSIBILITY FOR ALL DRILLING, COMPLETION AND PRODUCTION OPERATION. HALLIBURTON MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES RENDERED. IN NO EVENT WILL HALLIBURTON BE LIABLE FOR FAILURE TO OBTAIN ANY PARTICULAR RESULTS OR FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF ANY INFORMATION OR INTERPRETATION PROVIDED BY HALLIBURTON.

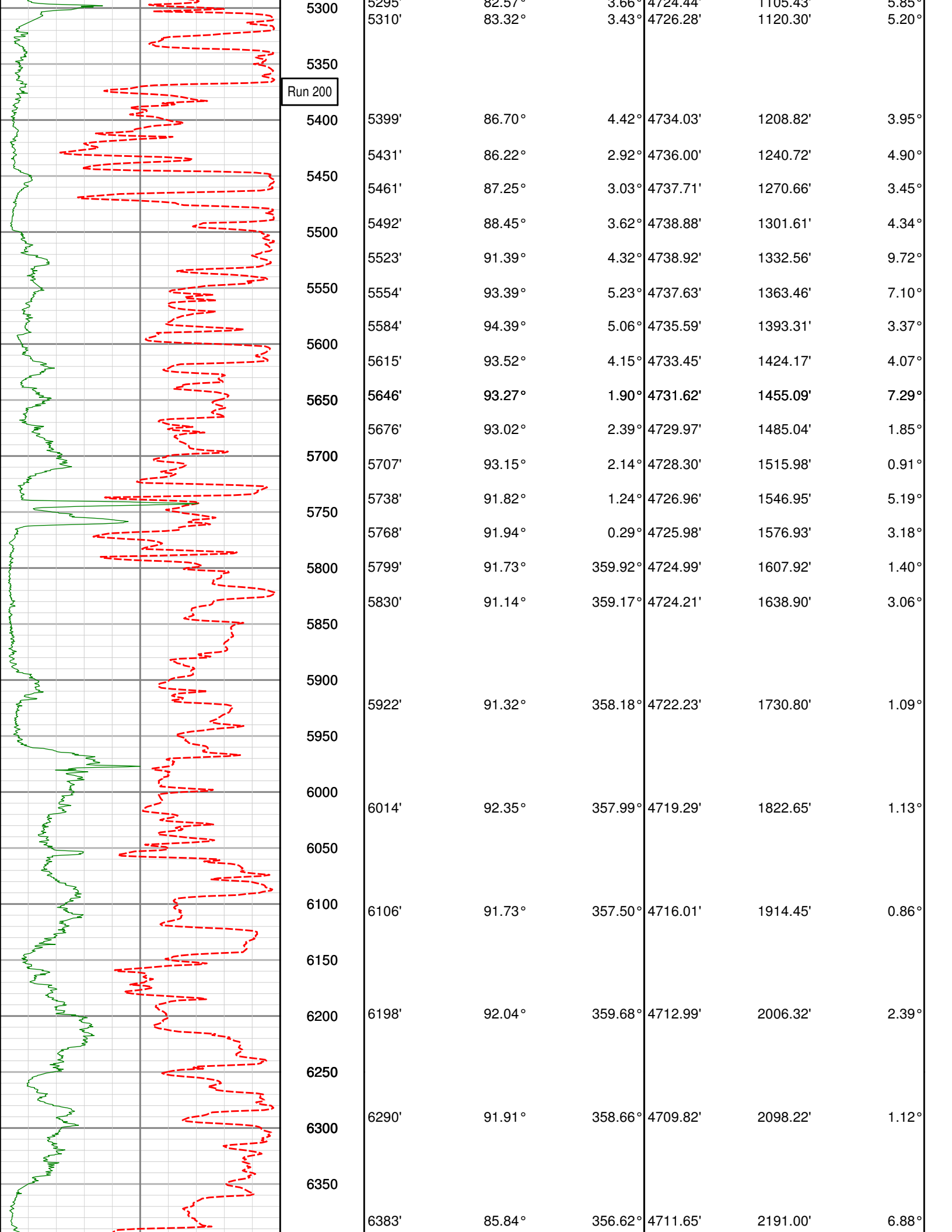
PCG GR XHi-Range RT	MD	Survey	Survey
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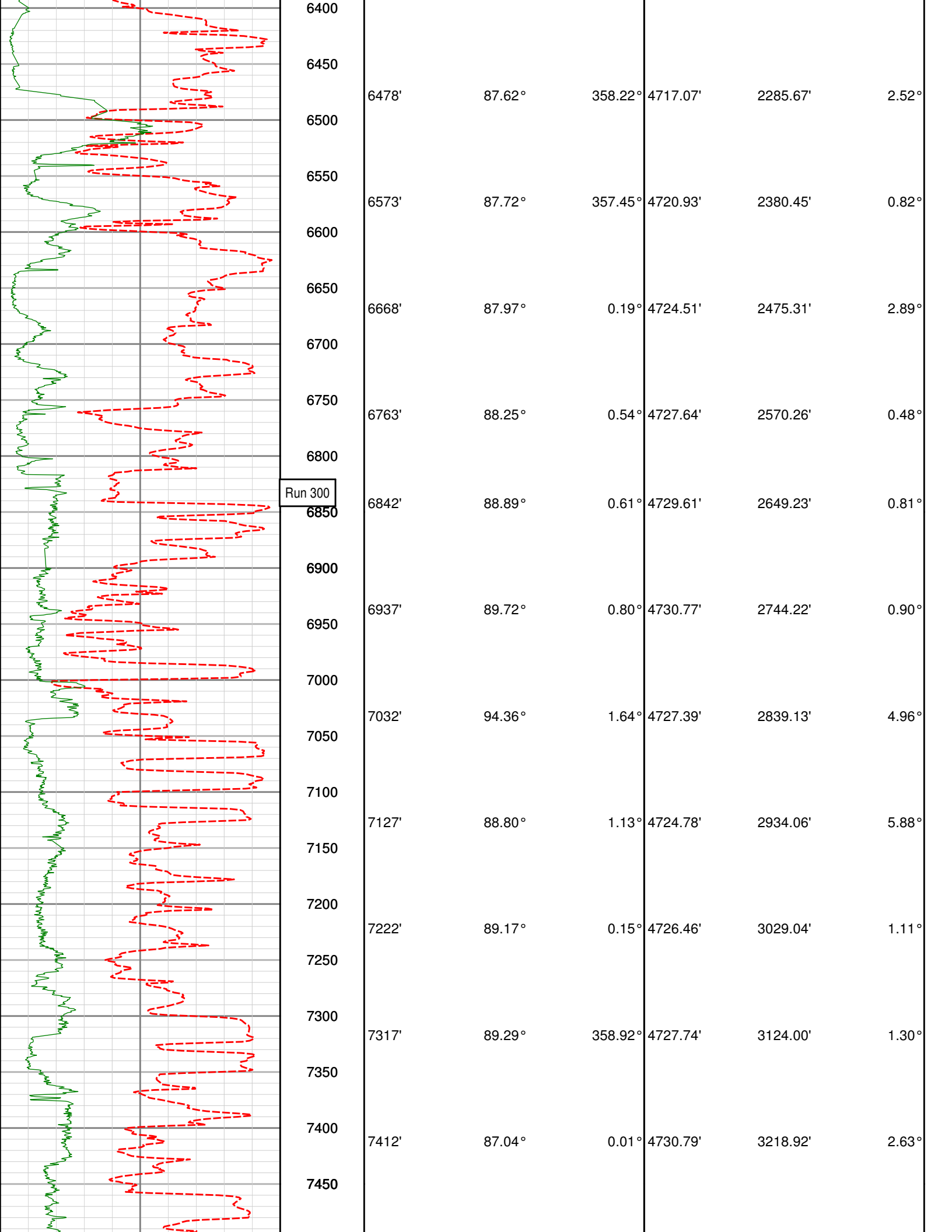


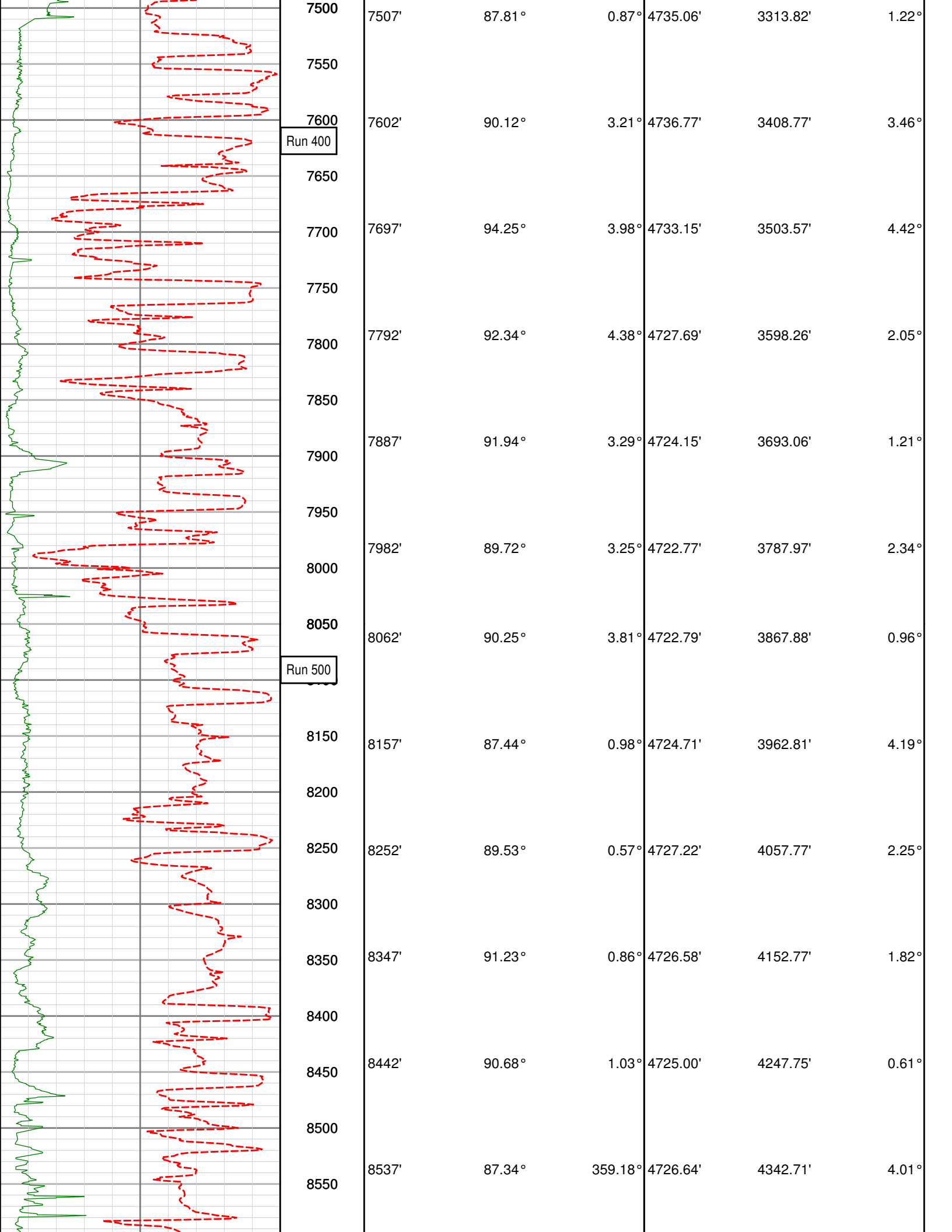


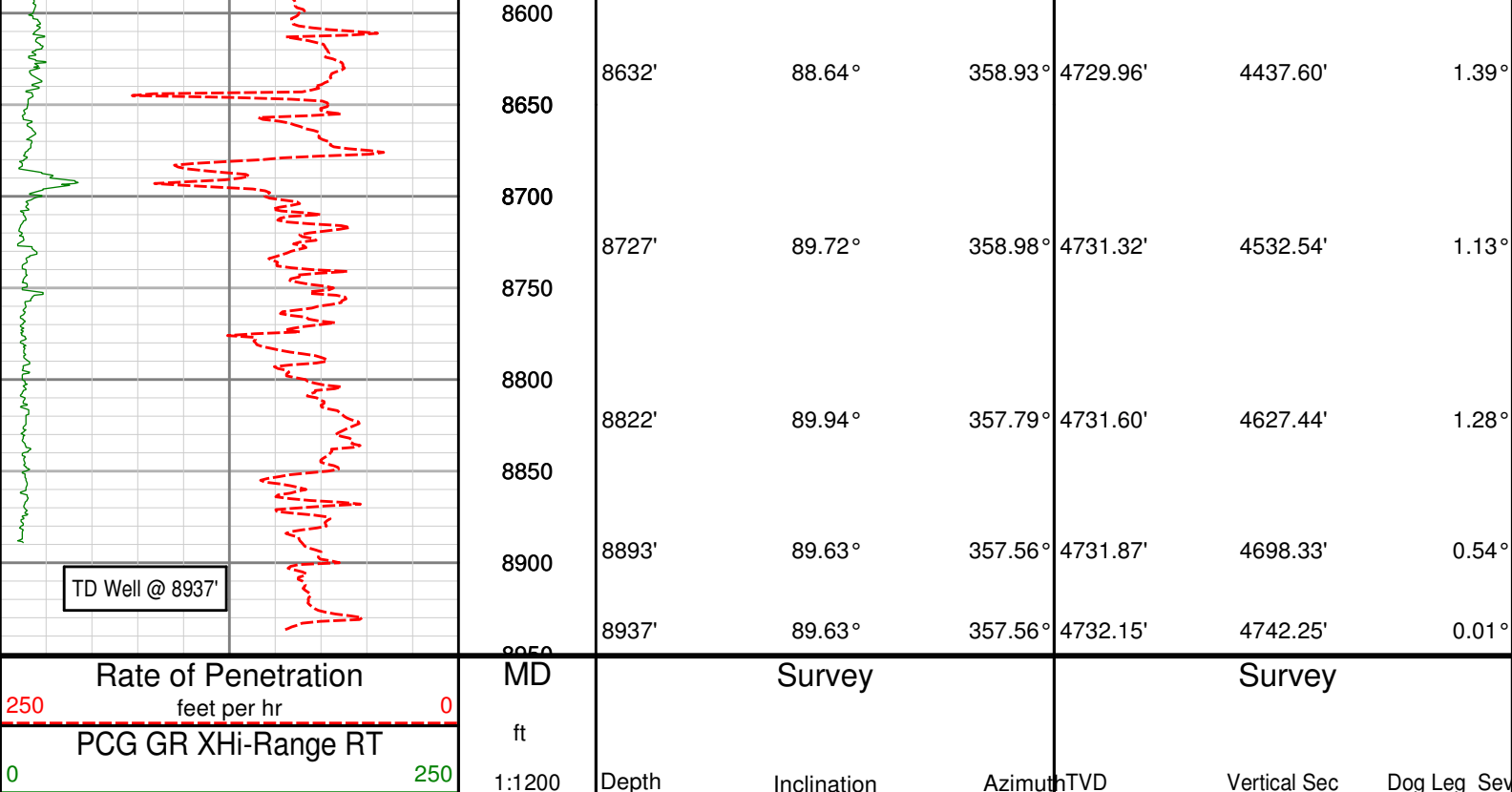
3100	3097'	0.97°	306.94°	3095.24'	44.77'	0.19°
3150						
3200	3186'	0.51°	10.80°	3184.23'	45.60'	0.98°
3250						
3300	3276'	0.20°	121.88°	3274.23'	45.91'	0.68°
3350						
3400	3366'	0.36°	99.55°	3364.23'	45.79'	0.21°
3450	3456'	0.48°	115.06°	3454.23'	45.60'	0.18°
3500						
3550	3545'	0.40°	111.57°	3543.22'	45.33'	0.09°
3600						
3650	3635'	0.47°	101.20°	3633.22'	45.16'	0.12°
3700	3680'	0.42°	54.59°	3678.22'	45.22'	0.79°
3750	3725'	2.30°	21.54°	3723.20'	46.17'	4.37°
3800	3770'	4.50°	20.32°	3768.12'	48.68'	4.88°
3850	3815'	7.14°	27.90°	3812.89'	52.83'	6.11°
3900	3859'	9.86°	36.23°	3856.40'	58.35'	6.77°
3950	3904'	13.65°	34.34°	3900.45'	65.93'	8.46°
4000	3949'	17.22°	28.60°	3943.82'	76.26'	8.60°
4050	3994'	20.82°	23.90°	3986.36'	89.52'	8.69°
4100	4039'	24.60°	19.17°	4027.87'	105.78'	9.33°
4150	4084'	28.77°	16.64°	4068.07'	125.11'	9.60°
	4129'	33.15°	13.54°	4106.65'	147.55'	10.37°
	4173'	37.01°	8.19°	4142.66'	172.44'	11.20°











HALLIBURTON

DIRECTIONAL SURVEY REPORT

Encana Natural Gas

Jasper 12H-2

J-Mur

Lane Kansas

USA

OK-XX-0009688843

Surveys from 74.28' to 2113.00' provided by Vaughn Energy Services. Surveys from 2199.00' to 8937.00' provided by Sperry Drilling. Final survey is a projection to bit.

Measured Depth (feet)	Inclination (degrees)	Direction (degrees)	Vertical Depth (feet)	Latitude (feet)	Departure (feet)	Vertical Section (feet)	Dogleg (deg/100ft)
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	TIE-IN
74.28	0.98	13.64	74.28	0.62 N	0.15 E	0.62	1.32
162.92	0.97	32.81	162.90	1.98 N	0.74 E	2.00	0.37
251.56	0.95	25.31	251.53	3.28 N	1.46 E	3.30	0.14
340.20	0.65	92.20	340.16	3.92 N	2.27 E	3.96	1.03
428.84	0.49	115.39	428.80	3.74 N	3.12 E	3.79	0.31
517.48	0.47	314.67	517.44	3.84 N	3.20 E	3.89	1.07
606.12	0.20	248.83	606.08	4.04 N	2.80 E	4.08	0.48
694.76	0.83	191.56	694.71	3.35 N	2.53 E	3.39	0.84
783.40	0.34	200.50	783.35	2.48 N	2.30 E	2.51	0.56
872.04	0.57	81.84	871.99	2.29 N	2.65 E	2.33	0.89
960.68	0.72	198.18	960.62	1.82 N	2.91 E	1.87	1.24
1049.32	0.71	265.82	1049.26	1.26 N	2.19 E	1.29	0.90
1137.96	0.69	153.56	1137.90	0.74 N	1.88 E	0.77	1.31
1226.60	0.96	331.20	1226.53	0.91 N	1.76 E	0.94	1.86
1315.24	0.59	292.62	1315.16	1.74 N	0.98 E	1.75	0.70
1403.88	0.50	336.82	1403.80	2.27 N	0.41 E	2.27	0.47
1492.52	0.56	297.21	1492.44	2.82 N	0.13 W	2.82	0.41
1581.16	0.30	270.57	1581.07	3.02 N	0.75 W	3.01	0.36
1669.80	0.63	276.71	1669.71	3.08 N	1.46 W	3.06	0.38
1758.44	2.84	278.36	1758.31	3.46 N	4.12 W	3.39	2.49
1847.08	4.20	270.86	1846.78	3.83 N	9.54 W	3.68	1.62
1935.72	3.21	301.10	1935.24	5.16 N	14.91 W	4.92	2.43
2024.36	2.97	303.10	2023.75	7.69 N	18.96 W	7.39	0.30

2113.00	2.84	306.74	2112.28	10.26 N	22.64 W	9.90	0.25
2199.00	4.57	9.69	2198.12	14.91 N	23.77 W	14.54	4.81
2244.00	4.63	8.23	2242.98	18.48 N	23.21 W	18.11	0.29
2289.00	4.50	7.34	2287.84	22.02 N	22.73 W	21.66	0.32
2334.00	4.35	3.16	2332.70	25.48 N	22.41 W	25.13	0.79
2379.00	4.09	359.43	2377.58	28.79 N	22.33 W	28.44	0.85
2424.00	3.48	355.93	2422.48	31.76 N	22.44 W	31.40	1.44
2468.00	2.87	350.20	2466.41	34.17 N	22.72 W	33.81	1.56
2513.00	2.10	350.57	2511.37	36.10 N	23.05 W	35.73	1.73
2558.00	1.58	354.97	2556.35	37.53 N	23.24 W	37.16	1.18
2648.00	1.80	351.76	2646.31	40.16 N	23.55 W	39.79	0.26
2738.00	0.86	312.34	2736.29	42.01 N	24.25 W	41.63	1.39
2827.00	0.92	305.56	2825.27	42.88 N	25.33 W	42.48	0.13
2917.00	1.05	300.51	2915.26	43.72 N	26.63 W	43.29	0.17
3007.00	0.89	297.24	3005.25	44.46 N	27.96 W	44.01	0.18
3097.00	0.97	306.94	3095.24	45.23 N	29.19 W	44.77	0.19
3186.00	0.51	10.80	3184.23	46.07 N	29.71 W	45.60	0.98
3276.00	0.20	121.88	3274.23	46.38 N	29.51 W	45.91	0.68
3366.00	0.36	99.55	3364.23	46.25 N	29.10 W	45.79	0.21
3456.00	0.48	115.06	3454.23	46.05 N	28.48 W	45.60	0.18
3545.00	0.40	111.57	3543.22	45.78 N	27.85 W	45.33	0.09
3635.00	0.47	101.20	3633.22	45.59 N	27.20 W	45.16	0.12
3680.00	0.42	54.59	3678.22	45.65 N	26.88 W	45.22	0.79
3725.00	2.30	21.54	3723.20	46.59 N	26.42 W	46.17	4.37
3770.00	4.50	20.32	3768.12	49.08 N	25.47 W	48.68	4.88
3815.00	7.14	27.90	3812.89	53.21 N	23.55 W	52.83	6.11
3859.00	9.86	36.23	3856.40	58.67 N	20.04 W	58.35	6.77
3904.00	13.65	34.34	3900.45	66.17 N	14.76 W	65.93	8.46
3949.00	17.22	28.60	3943.82	76.40 N	8.58 W	76.26	8.60
3994.00	20.82	23.90	3986.36	89.56 N	2.15 W	89.52	8.69
4039.00	24.60	19.17	4027.87	105.73 N	4.17 E	105.78	9.33
4084.00	28.77	16.64	4068.07	124.96 N	10.35 E	125.11	9.60
4129.00	33.15	13.54	4106.65	147.31 N	16.33 E	147.55	10.37
4173.00	37.01	8.19	4142.66	172.13 N	21.04 E	172.44	11.20
4218.00	38.88	3.52	4178.15	199.64 N	23.84 E	199.99	7.61
4263.00	39.56	358.40	4213.03	228.07 N	24.30 E	228.42	7.35
4308.00	42.08	356.05	4247.08	257.44 N	22.87 E	257.77	6.56
4353.00	44.88	356.04	4279.73	288.33 N	20.73 E	288.62	6.21
4398.00	47.64	356.00	4310.84	320.76 N	18.48 E	321.01	6.13
4443.00	50.07	356.76	4340.45	354.57 N	16.34 E	354.78	5.55
4487.00	52.64	357.60	4367.93	388.89 N	14.66 E	389.07	6.03
4532.00	54.85	358.67	4394.54	425.16 N	13.48 E	425.32	5.27
4577.00	57.08	359.12	4419.72	462.44 N	12.76 E	462.58	5.03
4622.00	57.99	358.76	4443.88	500.40 N	12.06 E	500.53	2.12
4667.00	58.47	358.69	4467.57	538.64 N	11.21 E	538.75	1.08
4712.00	58.99	358.15	4490.93	577.09 N	10.14 E	577.18	1.54
4757.00	59.42	358.20	4513.97	615.73 N	8.91 E	615.79	0.96
4802.00	59.81	357.95	4536.74	654.52 N	7.61 E	654.56	0.99
4846.00	60.26	357.79	4558.71	692.61 N	6.19 E	692.63	1.07
4891.00	60.57	357.56	4580.93	731.71 N	4.60 E	731.70	0.82
4936.00	60.85	357.13	4602.95	770.92 N	2.78 E	770.87	1.05
4981.00	61.31	357.03	4624.70	810.26 N	0.77 E	810.17	1.04
5026.00	63.00	357.96	4645.72	850.01 N	0.96 W	849.89	4.18
5071.00	65.64	359.79	4665.22	890.55 N	1.75 W	890.41	6.92
5116.00	69.23	1.35	4682.48	932.10 N	1.33 W	931.96	8.59
5160.00	73.22	2.14	4696.64	973.73 N	0.06 W	973.61	9.21
5205.00	76.47	3.30	4708.40	1017.11 N	2.01 E	1017.01	7.65
5250.00	79.94	3.77	4717.60	1061.07 N	4.73 E	1061.01	7.78
5295.00	82.57	3.66	4724.44	1105.45 N	7.61 E	1105.43	5.85
5310.00	83.32	3.43	4726.28	1120.30 N	8.53 E	1120.30	5.20
5399.00	86.70	4.42	4734.03	1208.74 N	14.60 E	1208.82	3.95
5431.00	86.22	2.92	4736.00	1240.62 N	16.64 E	1240.72	4.90
5461.00	87.25	3.03	4737.71	1270.53 N	18.20 E	1270.66	3.45
5492.00	88.45	3.62	4738.88	1301.45 N	20.00 E	1301.61	4.34
5523.00	91.39	4.32	4738.92	1332.37 N	22.14 E	1332.56	9.72
5554.00	93.39	5.23	4737.63	1363.24 N	24.72 E	1363.46	7.10
5584.00	94.39	5.06	4735.59	1393.05 N	27.40 E	1393.31	3.37
5615.00	93.52	4.15	4733.45	1423.87 N	29.88 E	1424.17	4.07
5646.00	93.27	1.90	4731.62	1454.77 N	31.52 E	1455.09	7.29
5676.00	93.02	2.39	4729.97	1484.71 N	32.64 E	1485.04	1.85
5707.00	93.15	2.14	4728.30	1515.64 N	33.86 E	1515.98	0.91

5738.00	91.82	1.24	4726.96	1546.60 N	34.77 E	1546.95	5.19
5768.00	91.94	0.29	4725.98	1576.58 N	35.17 E	1576.93	3.18
5799.00	91.73	359.92	4724.99	1607.56 N	35.23 E	1607.92	1.40
5830.00	91.14	359.17	4724.21	1638.55 N	34.98 E	1638.90	3.06
5922.00	91.32	358.18	4722.23	1730.50 N	32.86 E	1730.80	1.09
6014.00	92.35	357.99	4719.29	1822.40 N	29.79 E	1822.65	1.13
6106.00	91.73	357.50	4716.01	1914.27 N	26.18 E	1914.45	0.86
6198.00	92.04	359.68	4712.99	2006.19 N	23.91 E	2006.32	2.39
6290.00	91.91	358.66	4709.82	2098.12 N	22.58 E	2098.22	1.12
6383.00	85.84	356.62	4711.65	2190.98 N	18.76 E	2191.00	6.88
6478.00	87.62	358.22	4717.07	2285.72 N	14.50 E	2285.67	2.52
6573.00	87.72	357.45	4720.93	2380.57 N	10.92 E	2380.45	0.82
6668.00	87.97	0.19	4724.51	2475.48 N	8.97 E	2475.31	2.89
6763.00	88.25	0.54	4727.64	2570.42 N	9.58 E	2570.26	0.48
6842.00	88.89	0.61	4729.61	2649.40 N	10.38 E	2649.23	0.81
6937.00	89.72	0.80	4730.77	2744.38 N	11.55 E	2744.22	0.90
7032.00	94.36	1.64	4727.39	2839.27 N	13.56 E	2839.13	4.96
7127.00	88.80	1.13	4724.78	2934.17 N	15.86 E	2934.06	5.88
7222.00	89.17	0.15	4726.46	3029.15 N	16.92 E	3029.04	1.11
7317.00	89.29	358.92	4727.74	3124.13 N	16.15 E	3124.00	1.30
7412.00	87.04	0.01	4730.79	3219.07 N	15.26 E	3218.92	2.63
7507.00	87.81	0.87	4735.06	3313.97 N	15.99 E	3313.82	1.22
7602.00	90.12	3.21	4736.77	3408.89 N	19.37 E	3408.77	3.46
7697.00	94.25	3.98	4733.15	3503.61 N	25.32 E	3503.57	4.42
7792.00	92.34	4.38	4727.69	3598.19 N	32.23 E	3598.26	2.05
7887.00	91.94	3.29	4724.15	3692.91 N	38.58 E	3693.06	1.21
7982.00	89.72	3.25	4722.77	3787.74 N	44.00 E	3787.97	2.34
8062.00	90.25	3.81	4722.79	3867.59 N	48.93 E	3867.88	0.96
8157.00	87.44	0.98	4724.71	3962.47 N	52.90 E	3962.81	4.19
8252.00	89.53	0.57	4727.22	4057.42 N	54.18 E	4057.77	2.25
8347.00	91.23	0.86	4726.58	4152.41 N	55.37 E	4152.77	1.82
8442.00	90.68	1.03	4725.00	4247.38 N	56.94 E	4247.75	0.61
8537.00	87.34	359.18	4726.64	4342.35 N	57.11 E	4342.71	4.01
8632.00	88.64	358.93	4729.96	4437.28 N	55.54 E	4437.60	1.39
8727.00	89.72	358.98	4731.32	4532.25 N	53.82 E	4532.54	1.13
8822.00	89.94	357.79	4731.60	4627.21 N	51.14 E	4627.44	1.28
8893.00	89.63	357.56	4731.87	4698.15 N	48.25 E	4698.33	0.54
8937.00	89.63	357.56	4732.15	4742.11 N	46.38 E	4742.25	0.01

CALCULATION BASED ON MINIMUM CURVATURE METHOD

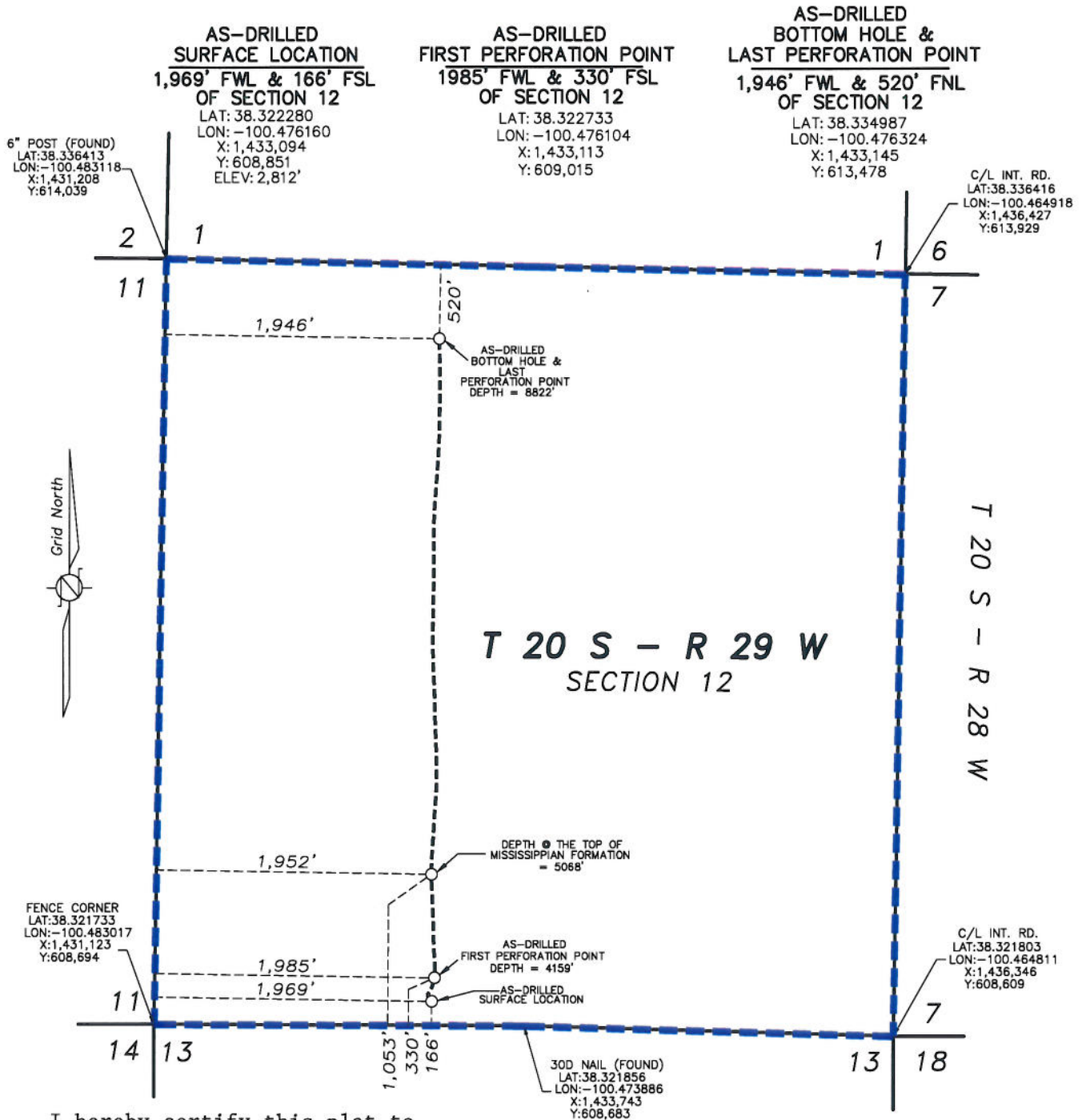
**SURVEY COORDINATES RELATIVE TO WELL SYSTEM REFERENCE POINT
TVD VALUES GIVEN RELATIVE TO DRILLING MEASUREMENT POINT**

**VERTICAL SECTION RELATIVE TO WELL HEAD
VERTICAL SECTION IS COMPUTED ALONG A DIRECTION OF 0.90 DEGREES (GRID)
A TOTAL CORRECTION OF 7.47 DEG FROM MAGNETIC NORTH TO GRID NORTH HAS BEEN APPLIED**

**HORIZONTAL DISPLACEMENT IS RELATIVE TO THE WELL HEAD.
HORIZONTAL DISPLACEMENT(CLOSURE) AT 8937.00 FEET
IS 4742.34 FEET ALONG 0.56 DEGREES (GRID)**

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY. DISTANCES, COORDINATES AND BEARINGS SHOWN ARE NOT INTENDED TO BE DEFINITIVE IN ESTABLISHING ACTUAL TITLE BOUNDARIES. THIS DRAWING IS FOR CONSTRUCTION PURPOSES ONLY.

All Bearings, Distances, and Coordinates shown hereon are based on the Kansas State Plane Coordinate System, N.A.D. 27 Datum, South Zone.



I hereby certify this plat to be true and correct to the best of my knowledge and belief.

Sharon Cook

REVIEW COPY

Sharon Cook
11/09/12

AS-DRILLED PLAT
ENCANA OIL & GAS (USA) INC.
JASPER 12H-2
LANE COUNTY, KANSAS
SCALE: 1" = 1000'

--- = UNIT LINE

REV: 9-25-2012
REV: 8-28-2012
8-20-2012

T120322-12H-2-AD-RR