

**CONFIDENTIAL**

**ORIGINAL**

Form must be Typed

**WELL COMPLETION FORM**

**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

12/19/12

OPERATOR: License # 5278

Name: EOG Resources, Inc.

Address 1: 3817 NW Expressway, Suite 500

Address 2: Suite 500

City Oklahoma City State OK Zip: 73112 +

Contact Person: DAWN ROCKEL **KCC**

Phone ( 405 ) 246-3226 **DEC 19 2010**

CONTRACTOR: License # 34000 **CONFIDENTIAL**

Name: KENAI MID-CONTINENT, INC. **RECEIVED**

Wellsite Geologist: \_\_\_\_\_ **DEC 23 2010**

Purchaser: N/A **KCC WICHITA**

Designate Type of Completion

New Well  Re-Entry  Workover

Oil  SWD  SIOW

Gas  ENHR  SIGW

CM (Coal Bed Methane)  Temp. Abd.

Dry  Other \_\_\_\_\_

(Core, WSW, Expl., Cathodic, etc.)

If Workover/Reentry: 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 \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_

Commingled \_\_\_\_\_ Docket No. \_\_\_\_\_

Dual Completion \_\_\_\_\_ Docket No. \_\_\_\_\_

Other (SWD or Enhr?) \_\_\_\_\_ Docket No. \_\_\_\_\_

<u>8/29/10</u>	<u>9/5/10</u>	<u>9/17/10</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API NO. 15- 055-22080-00-00

Spot Description: \_\_\_\_\_

E2 - SW - SE - SW Sec. 4 Twp. 25 S. R. 32  East  West

330 Feet from  North /  South Line of Section

1709 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE  NW  SE  SW

County FINNEY

Lease Name BROOKOVER Well # 4 #1

Field Name \_\_\_\_\_

Producing Formation MISSISSIPPIAN

Elevation: Ground 2882' Kelley Bushing 2893'

Total Depth 5050' Plug Back Total Depth N/A

Amount of Surface Pipe Set and Cemented at 1731 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** API 179-11  
(Data must be collected from the Reserve Pit)

Chloride content 4000 ppm Fluid volume 1000 bbls

Dewatering method used EVAPORATION

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name HAYDEN, SHAWN OR BLANCHE dba HAYDEN OPERAT

Lease Name LIZ SMITH License No. 33562

Quarter \_\_\_\_\_ Sec. 26 Twp. 30 S. R. 34  East  West

County HASKELL Docket No. D26802

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature Dawn Rockel

Title SR. OPERATIONS ASSISTANT Date 12/20/10

Subscribed and sworn to before me this 22nd day of December

Notary Public Deana J. Hehert Notary Public State of Oklahoma  
Commission # 09005487 Expires 07/06/13

Date Commission Expires 7/6/13

**KCC Office Use ONLY**

- Letter of Confidentiality Attached 12/19/10
- If Denied, Yes  No Date: 12/19/12
- Wireline Log Received
- Geologist Report Received
- UIC Distribution

Operator Name EOG RESOURCES, INC.

Lease Name BROCKOVER

Well # 4 #1

Sec. 4 Twp. 25 S.R. 32  East  West

County FINNEY

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all drill stem 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 during test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken  Yes  No  
(Attach Additional Sheets)

Samples Sent to Geological Survey  Yes  No

Cores Taken  Yes  No

Electric Log Run  Yes  No  
(Submit Copy)

List All E.Logs Run:

ARRAY, BOREHOLE SONIC, MICRO, SD/DS NEUTRON, SD/DS NEUTRON MICRO & CEMENT BOND.

Log Formation (Top), Depth and Datums  Sample

Name Top Datum

SEE ATTACHED

CASING RECORD  New  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
SURFACE	12 1/4	8 5/8	24#	1731'	MIDCON2	300	SEE ATTACHED
					CLASS 'A'	200	
PRODUCTION	7 7/8	5 1/2	15.5#	5043'	50/50 POZ	125	SEE ATTACHED

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				

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
4	4866'-4884'		

TUBING RECORD	Size <u>2 7/8</u>	Set At <u>4932'</u>	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
---------------	-------------------	---------------------	-----------	---

Date of First, Resumed Production, SWD or Enhr. <u>9/17/10</u>	Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)
--	--

Estimated Production Per 24 Hours	Oil Bbls. <u>198</u>	Gas Mcf <u>0</u>	Water Bbls. <u>4</u>	Gas-Oil Ratio <u>---</u>	Gravity <u>30</u>
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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 checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	Production Interval <u>4866'-4884'</u>
--	--	---

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ACO-1 Completion Report		
Well Name : BROOKOVER 4 #1		
FORMATION	TOP	DATUM
BASE OF HEEBNER	3897	-1004
LANSING	3970	-1077
KANSAS CITY	4190	-1297
MARMATON	4468	-1575
CHEROKEE	4581	-1688
ATOKA	4735	-1842
MORROW	4790	-1897
CHESTER	4819	-1926
ST LOUIS	4886	-1993
SPRINGER	4992	-2099

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**Cementing Job Summary**

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Sold To #: 348223	Ship To #: 2804295	Quote #:	Sales Order #: 7602680
Customer: EOG RESOURCES INC EBUSINESS		Customer Rep: Sessions, Jackie	
Well Name: Brookover	Well #: 4-1	API/UWI #:	
Field:	City (SAP): SUBLETTE	County/Parish: Stevens	State: Kansas
Contractor: ABERCROMBIE	Rig/Platform Name/Num: 55		
Job Purpose: Cement Surface Casing			
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: DRAKE, BRANDON		Srvc Supervisor: WILTSHIRE, MERSHEK	MBU ID Emp #: 195811

**Job Personnel**

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
FARNUM, GORDON	10	477892	LOPEZ, JUAN R	10	198514	PORTILLO, CESAR	10	457847
WILTSHIRE, MERSHEK Tonje	10	195811						

**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	Operating Hours

TOTAL Total is the sum of each column separately

Job				Job Times			
Formation Name	Formation Depth (MD) Top	Bottom	Called Out	Date	Time	Time Zone	
			On Location	30 - Aug - 2010	00:30	CST	
Form Type	BHST		Job Started	30 - Aug - 2010	04:30	CST	
Job depth MD	1700. ft	Job Depth TVD	Job Completed	30 - Aug - 2010	12:15	CST	
Water Depth		Wk Ht Above Floor	1700. ft	30 - Aug - 2010	13:29	CST	
Perforation Depth (MD) From		To	Departed Loc	30 - Aug - 2010	14:30	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
Surface Hole				12.25					1700.		
Surface Casing	Unknown		8.625	8.097	24.				1735.		

**Sales/Rental/3<sup>rd</sup> Party (HES)**

Description	Qty	Qty uom	Depth	Supplier
CENTRALIZER ASSY - API - 8-5/8 CSG X	12	EA		
CLAMP - LIMIT - 8-5/8 - HINGED -	3	EA		
BASKET - CEMENT - 8 5/8 CSG X 12 1/4	1	EA		
KIT,HALL WELD-A	1	EA		
PLUG,CMTG, TOP, 8 5/8, HWE, 7.20 MIN/8.09 MA	1	EA		

**Tools and Accessories**

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			

**Miscellaneous Materials**

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

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# Cementing Job Summary

Fluid Data									
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	Mid Con 2 Standard	MIDCON-2 CEMENT STANDARD - SBM (15078)	300.0	sacks	11.4	2.96	18.14		18.14
	3 %	CALCIUM CHLORIDE - HI TEST PELLET (100005053)							
	0.1 %	WG-17, 50 LB SK (100003623)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	18.138 Gal	FRESH WATER							
2	Standard	CMT - STANDARD CEMENT (100003684)	200.0	sacks	15.8	1.2	5.22		5.22
	94 lbm	CMT - STANDARD - CLASS A REG OR TYPE I, BULK (100003684)							
	2 %	CALCIUM CHLORIDE - HI TEST PELLET (100005053)							
	0.25 lbm	POLY-E-FLAKE (101216940)							
	5.218 Gal	FRESH WATER							
3	Displacement		108.00	bbbl	8.33	.0	.0	.0	
Calculated Values		Pressures			Volumes				
Displacement		Shut In: Instant		Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min		Cement Returns		Actual Displacement		Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating		Mixing		Displacement		Avg. Job			
Cement Left In Pipe	Amount	45 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					

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**Cementing Job Log**

*The Road to Excellence Starts with Safety*

Sold To #: 348223	Ship To #: 2804295	Quote #:	Sales Order #: 7602680
Customer: EOG RESOURCES INC EBUSINESS		Customer Rep: Sessions, Jackie	
Well Name: Brookover	Well #: 4-1	API/UWI #:	
Field:	City (SAP): SUBLETTE	County/Parish: Stevens	State: Kansas
Legal Description:			
Lat:		Long:	
Contractor: ABERCROMBIE		Rig/Platform Name/Num: 55	
Job Purpose: Cement Surface Casing			Ticket Amount:
Well Type: Development Well		Job Type: Cement Surface Casing	
Sales Person: DRAKE, BRANDON		Srvc Supervisor: WILTSHIRE, MERSHEK	MBU ID Emp #: 195811

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	08/30/2010 00:30							
Pre-Job Safety Meeting	08/30/2010 00:45							
Arrive At Loc	08/30/2010 04:30							
Start Job	08/30/2010 12:15							8 5/8" @ 1735'
Test Lines	08/30/2010 12:15						2500.0	
Pump Lead Cement	08/30/2010 12:19		6.5	158			185.0	300 SKS MIDCON 2 @ 11.4#
Pump Tail Cement	08/30/2010 12:42		6.5	43			217.0	200 SKS CLASS A @ 15.6#
Drop Top Plug	08/30/2010 12:52		5		201		200.0	END CEMENT
Pump Displacement	08/30/2010 12:54		10	108			180.0	WATER
Stage Cement	08/30/2010 13:09		2	88			370.0	
Other	08/30/2010 13:25						450.0	PRESSURE BEFORE LANDING PLUG
Bump Plug	08/30/2010 13:25		2		108		1150.0	FLOAT HELD
End Job	08/30/2010 13:29							
Cement Returns to Surface	08/30/2010 13:30				78			78 BBLs OF CEMENT TO PIT

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# Cementing Job Summary

The Road to Excellence Starts with Safety

Sold To #: 348223	Ship To #: 2804295	Quote #:	Sales Order #: 7618417
Customer: EOG RESOURCES INC EBUSINESS		Customer Rep: Knox, Mike	
Well Name: Brookover	Well #: 4-1H	API/UWI #:	
Field:	City (SAP): SUBLETTE	County/Parish: Stevens	State: Kansas
Contractor: Kenai	Rig/Platform Name/Num: 55		
Job Purpose: Cement Production Casing			
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: BLAKEY, JOSEPH		Srvc Supervisor: SMITH, BOBBY	MBU ID Emp #: 108036

### Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
ARNETT, JAMES Ray	8	226567	GREEN, SCOTT Anthony	8	301261	SMITH, BOBBY Wayne	8	108036
TORRES, CLEMENTE	8	344233						

### Equipment

HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way	HES Unit #	Distance-1 way
10714253C	30 mile	10866807	30 mile	10940718	30 mile	10994449	30 mile
10998524	30 mile						

### Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
TOTAL								
<i>Total is the sum of each column separately</i>								

### Job

### Job Times

Formation Name	Formation Depth (MD) Top	Bottom	Called Out	Date	Time	Time Zone
Form Type		BHST	On Location	04 - Sep - 2010	22:30	CST
Job depth MD	5050. ft	Job Depth TVD	Job Started	05 - Sep - 2010	02:41	CST
Water Depth		Wk Ht Above Floor	Job Completed	05 - Sep - 2010	04:00	CST
Perforation Depth (MD) From		To	Departed Loc	05 - Sep - 2010	06:30	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
7 7/8 Open Hole				7.875				1700.	5260.		
5 1/2 Production Casing	Unknown		5.5	4.95	15.5				5250.		
8 5/8 Surface Casing	Unknown		8.625	8.097	24.			1700.			

### Sales/Rental/3<sup>rd</sup> Party (HES)

Description	Qty	Qty uom	Depth	Supplier
CENTRALIZER ASSY - TURBO - API -	20	EA		
CLAMP - LIMIT - 5-1/2 - HINGED -	3	EA		
PLUG,CMTG, TOP, 8 5/8, HWE, 7.20 MIN/8.09 MA	1	EA		

### Tools and Accessories

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			

### Miscellaneous Materials

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

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**Cementing Job Summary**

Fluid Data										
Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft <sup>3</sup> /sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	
1	Primary Cement	POZ STANDARD 50/50 - SBM (12308)	125.0	sacks	13.5	1.75	8.43		8.43	
	8 %	CAL-SEAL 60, 50 LB BAG (101217146)								
	10 %	SALT, 100 LB BAG (100003652)								
	2 lbm	PRESSUR-SEAL LCM, 40 LB (101204356)								
	0.6 %	HALAD(R)-344, 50 LB (100003670)								
	0.5 %	D-AIR 3000 (101007446)								
	0.1 %	WG-17, 50 LB SK (100003623)								
	8.434 Gal	FRESH WATER								
2	2% KCL Displacement		119.00	bbl	8.45	.0	.0	.0		
	167 lbm/Mgal	POTASSIUM CHLORIDE - KCL, 50 LB BAG (100001585)								
3	Rat Hole & Mouse Hole Plug Cement	POZ STANDARD 50/50 - SBM (12308)	50.0	sacks	13.5	1.75	8.43		8.43	
	8 %	CAL-SEAL 60, 50 LB BAG (101217146)								
	10 %	SALT, 100 LB BAG (100003652)								
	2 lbm	PRESSUR-SEAL LCM, 40 LB (101204356)								
	0.6 %	HALAD(R)-344, 50 LB (100003670)								
	0.5 %	D-AIR 3000 (101007446)								
	0.1 %	WG-17, 50 LB SK (100003623)								
	8.434 Gal	FRESH WATER								
Calculated Values		Pressures			Volumes					
Displacement		Shut In: Instant			Lost Returns		Cement Slurry		Pad	
Top Of Cement		5 Min			Cement Returns		Actual Displacement		Treatment	
Frac Gradient		15 Min			Spacers		Load and Breakdown		Total Job	
Rates										
Circulating		Mixing			Displacement		Avg. Job			
Cement Left In Pipe	Amount	0 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						

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 Cementing Job Log

The Road to Excellence Starts with Safety

Sold To #: 348223	Ship To #: 2804295	Quote #:	Sales Order #: 7618417
Customer: EOG RESOURCES INC EBUSINESS		Customer Rep: Knox, Mike	
Well Name: Brookover	Well #: 4-1H	API/UWI #:	
Field:	City (SAP): SUBLETTE	County/Parish: Stevens	State: Kansas
Legal Description:			
Lat:		Long:	
Contractor: Kenai		Rig/Platform Name/Num: 55	
Job Purpose: Cement Production Casing		Ticket Amount:	
Well Type: Development Well		Job Type: Cement Production Casing	
Sales Person: BLAKEY, JOSEPH		Srv Supervisor: SMITH, BOBBY	
		MBU ID Emp #: 106036	

Activity Description	Date/Time	Cht #	Rate bbl/mhr	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Call Out	09/04/2010 19:00							
Depart Location Safety Meeting	09/04/2010 21:00							
Arrive At Loc	09/04/2010 22:30							
Assessment Of Location Safety Meeting	09/04/2010 22:30							casing going in the hole
Pre-Rig Up Safety Meeting	09/04/2010 22:35							
Rig-Up Completed	09/04/2010 23:30							
Other	09/05/2010 01:45							casing on bottom. rig circulating.
Safety Meeting - Pre Job	09/05/2010 02:30							
Start Job	09/05/2010 02:43							
Test Lines	09/05/2010 02:44						4500.0	
Pump Tail Cement	09/05/2010 02:50		6	38.95			500.0	125 sx = 216.75 ft3. top of cement 3821.06 ft
Drop Top Plug	09/05/2010 02:57							
Pump Displacement	09/05/2010 03:03		10.5	0			500.0	kcl water
Bump Plug	09/05/2010 03:16		2	119			1100.0 0	2000.0 0
Other	09/05/2010 03:20							plug held.
End Job	09/05/2010 03:21							
Start Job	09/05/2010 03:43							rat & mouse
Pump Lead Cement	09/05/2010 03:46		3	7.5				25 sx rat hole

Sold To #: 348223      Ship To #: 2804295      Quote #:      Sales Order #: 7618417

SUMMIT Version: 7.20.130

Sunday, September 05, 2010 04:43:00

HALLIBURTON

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*Cementing Job Log*

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Pump Lead Cement	09/05/2010 03:53		3	7.5				25 sx mouse hole
End Job	09/05/2010 04:01							rat & mouse
Safety Meeting - Pre Rig-Down	09/05/2010 04:05							
Rig-Down Completed	09/05/2010 08:00							
Safety Meeting - Departing Location	09/05/2010 08:15							
Depart Location for Service Center or Other Site	09/05/2010 08:30							Thank you for calling Halliburton. Bob and crew.

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Sold To # : 348223

Ship To # : 2804295

Quote # :

Sales Order # :

7618417

SUMMIT Version: 7.20.130

Sunday, September 05, 2010 04:43:00



# Weatherford® Completion Systems

## DRILL STEM TEST REPORT

Prepared For: **EOG Resources Inc.**

3817 NW Expressway Oklahoma City Ok.  
73112+1483

ATTN: Mike

**4/25/32**

### Brookover 4-1

Start Date: 2010.09.02 @ 09:15:00

End Date: 2010.09.02 @ 20:32:25

Job Ticket #: 40278          DST #: 1

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ALPINE OIL SERVICES CORPORATION  
2460, 240 - 4 Avenue S.W. Calgary, AB. T2P 4H4  
ph: 263-7800 fax: 264-7260



# Weatherford® Completion Systems

## DRILL STEM TEST REPORT

EOG Resources Inc.

**Brookover 4-1**

3817 NW Expressway Oklahoma City Ok.  
73112+1483

**4/25/32**

ATTN: Mike

Job Ticket: 40278

**DST#: 1**

Test Start: 2010.09.02 @ 09:15:00

### GENERAL INFORMATION:

Formation: **Chester Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:26:40

Time Test Ended: 20:32:25

Test Type: Conventional Bottom Hole

Tester: Harley Davidson

Unit No: 33

Interval: **4860.00 ft (KB) To 4894.00 ft (KB) (TVD)**

Total Depth: 4894.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 2893.00 ft (KB)

2874.00 ft (CF)

KB to GR/CF: 19.00 ft

**Serial #: 6772**

**Inside**

Press@RunDepth: 763.92 psig @ 4862.00 ft (KB)

Start Date: 2010.09.02

End Date:

2010.09.02

Start Time: 09:15:05

End Time:

20:32:25

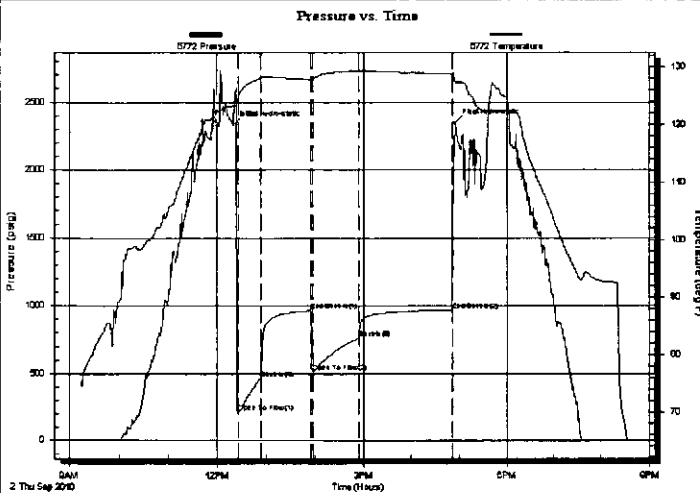
Capacity: 8000.00 psig

Last Calib.: 2010.09.02

Time On Btm: 2010.09.02 @ 12:20:40

Time Off Btm: 2010.09.02 @ 16:55:30

**TEST COMMENT:** IF- Strong blow BOB 1.5 min. No GTS.  
IS- Strong blow back. GTS.  
FF- Strong blow BOB GTS ASAO. Gas to small to measure.  
FS- Strong blow back.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2335.04	123.22	Initial Hydro-static
6	214.69	125.08	Open To Flow (1)
33	465.89	127.98	Shut-in(1)
95	965.28	127.81	End Shut-in(1)
96	516.31	127.68	Open To Flow (2)
154	763.92	129.25	Shut-in(2)
271	964.08	128.70	End Shut-in(2)
275	2347.46	127.29	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
2800.00	80% oil 20%gas	35.92

### Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

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# DRILL STEM TEST REPORT

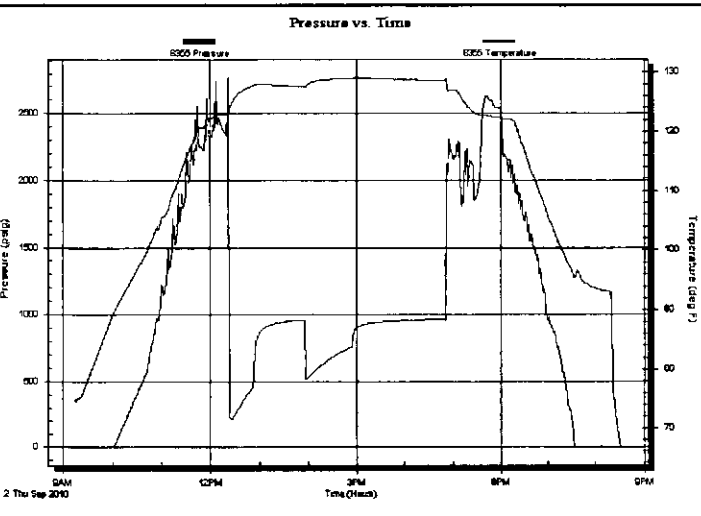
EOG Resources Inc. **Brookover 4-1**  
 3817 NW Expressway Oklahoma City Ok. **4/25/32**  
 73112+1483 Job Ticket: 40278 **DST#: 1**  
 ATTN: Mike Test Start: 2010.09.02 @ 09:15:00

**GENERAL INFORMATION:**

Formation: **Chester Sand** Test Type: Conventional Bottom Hole  
 Deviated: No Whipstock: ft (KB) Tester: Harley Davidson  
 Time Tool Opened: 12:26:40 Unit No: 33  
 Time Test Ended: 20:32:25 Reference Elevations: 2893.00 ft (KB)  
**Interval: 4860.00 ft (KB) To 4894.00 ft (KB) (TVD)** 2874.00 ft (CF)  
 Total Depth: 4894.00 ft (KB) (TVD) KB to GR/CF: 19.00 ft  
 Hole Diameter: 7.78 inches Hole Condition: Fair

**Serial #: 8355** **Inside**  
 Press@RunDepth: psig @ 4862.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2010.09.02 End Date: 2010.09.02 Last Calib.: 2010.09.02  
 Start Time: 09:15:05 End Time: 20:31:40 Time On Btm:  
Time Off Btm:

**TEST COMMENT:** IF- Strong blow BOB 1.5 min. No GTS.  
 IS- Strong blow back. GTS.  
 FF- Strong blow BOB GTS ASAO. Gas to small to measure.  
 FS- Strong blow back.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
2800.00	80% oil 20% gas	35.92

Gas Rates		
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

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# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

EOG Resources Inc.

**Brookover 4-1**

3817 NW Expressway Oklahoma City Ok.  
 73112+1483

**4/25/32**

Job Ticket: 40278

**DST#: 1**

ATTN: Mike

Test Start: 2010.09.02 @ 09:15:00

**Tool Information**

Drill Pipe:	Length: 4467.00 ft	Diameter: 3.80 inches	Volume: 62.66 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 369.00 ft	Diameter: 2.25 inches	Volume: 1.81 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 64.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4860.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	64.00 ft			
Number of Packers:	2	Diameter: 7.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4831.00	
Shut In Tool	5.00			4836.00	
Sampler	2.00			4838.00	
Hydraulic tool	5.00			4843.00	
Jars	5.00			4848.00	
Safety Joint	3.00			4851.00	
Packer	5.00			4856.00	30.00 Bottom Of Top Packer
Packer	4.00			4860.00	
Stubb	1.00			4861.00	
Perforations	1.00			4862.00	
Recorder	0.00	6772	Inside	4862.00	
Recorder	0.00	8355	Inside	4862.00	
Perforations	29.00			4891.00	
Bullnose	3.00			4894.00	34.00 Bottom Packers & Anchor

**Total Tool Length: 64.00**

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**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

EOG Resources Inc. **Brookover 4-1**  
 3817 NW Expressway Oklahoma City Ok. **4/25/32**  
 73112+1483 Job Ticket: 40278 **DST#: 1**  
 ATTN: Mike Test Start: 2010.09.02 @ 09:15:00

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 45.00 sec/qt	Cushion Volume: bbl		
Water Loss: 12.00 cm <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2400.00 ppm			
Filter Cake: inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
2800.00	80% oil 20%gas	35.915

Total Length: 2800.00 ft Total Volume: 35.915 bbl  
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:  
 Laboratory Name: Laboratory Location:  
 Recovery Comments: Sampler Data- 950 PSI 2000 ML oil 14CFD gas

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# DRILL STEM TEST REPORT

**GAS RATES**

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EOG Resources Inc.  
3817 NW Expressway Oklahoma City Ok.  
73112+1483  
ATTN: Mike

**Brookover 4-1**  
**4/25/32**  
Job Ticket: 40278      **DST#: 1**  
Test Start: 2010.09.02 @ 09:15:00

## Gas Rates Information

Temperature:            59 deg C  
Relative Density:      0.65  
Z Factor:                0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
		0.00	0.00	0.00

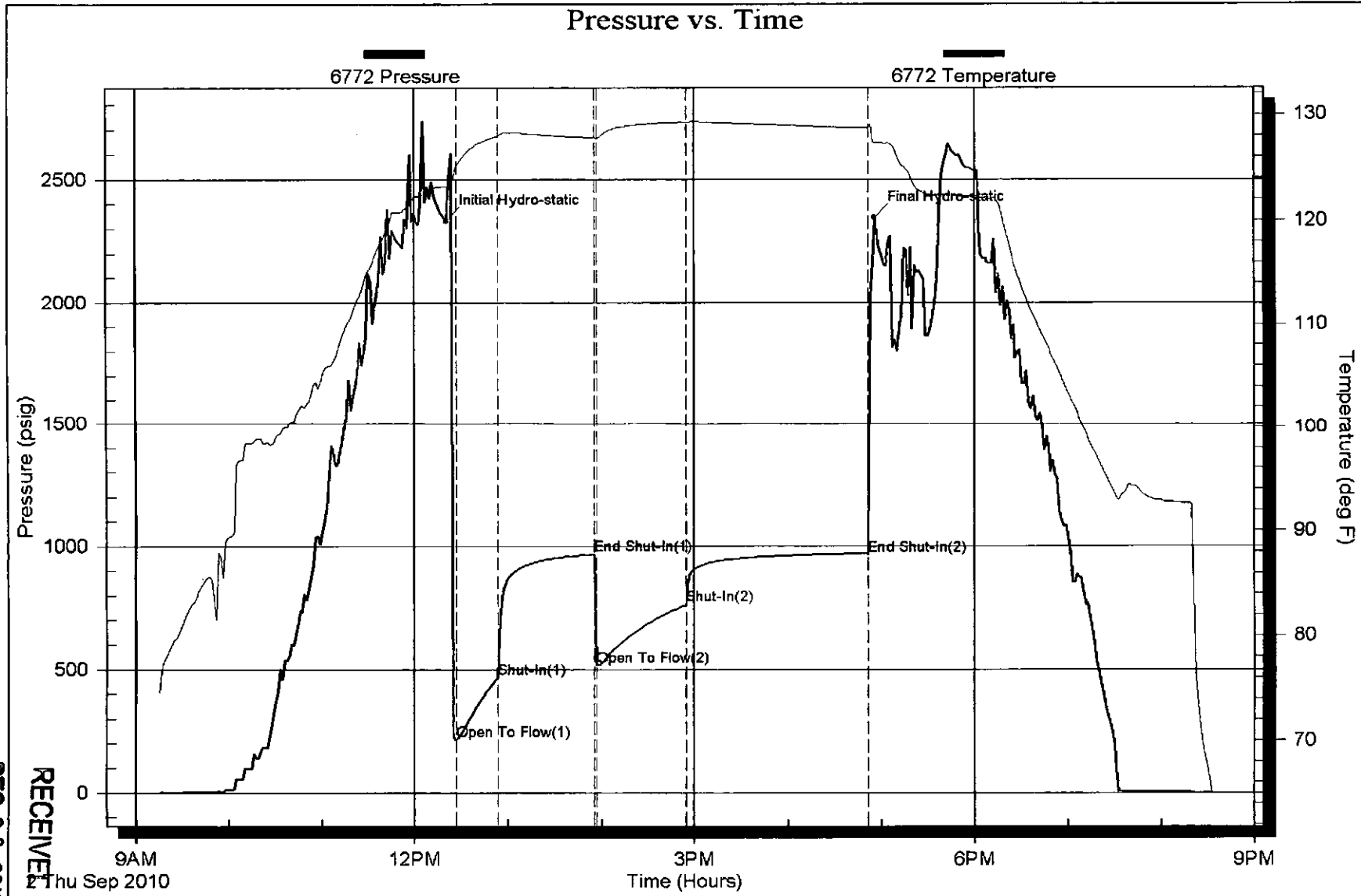
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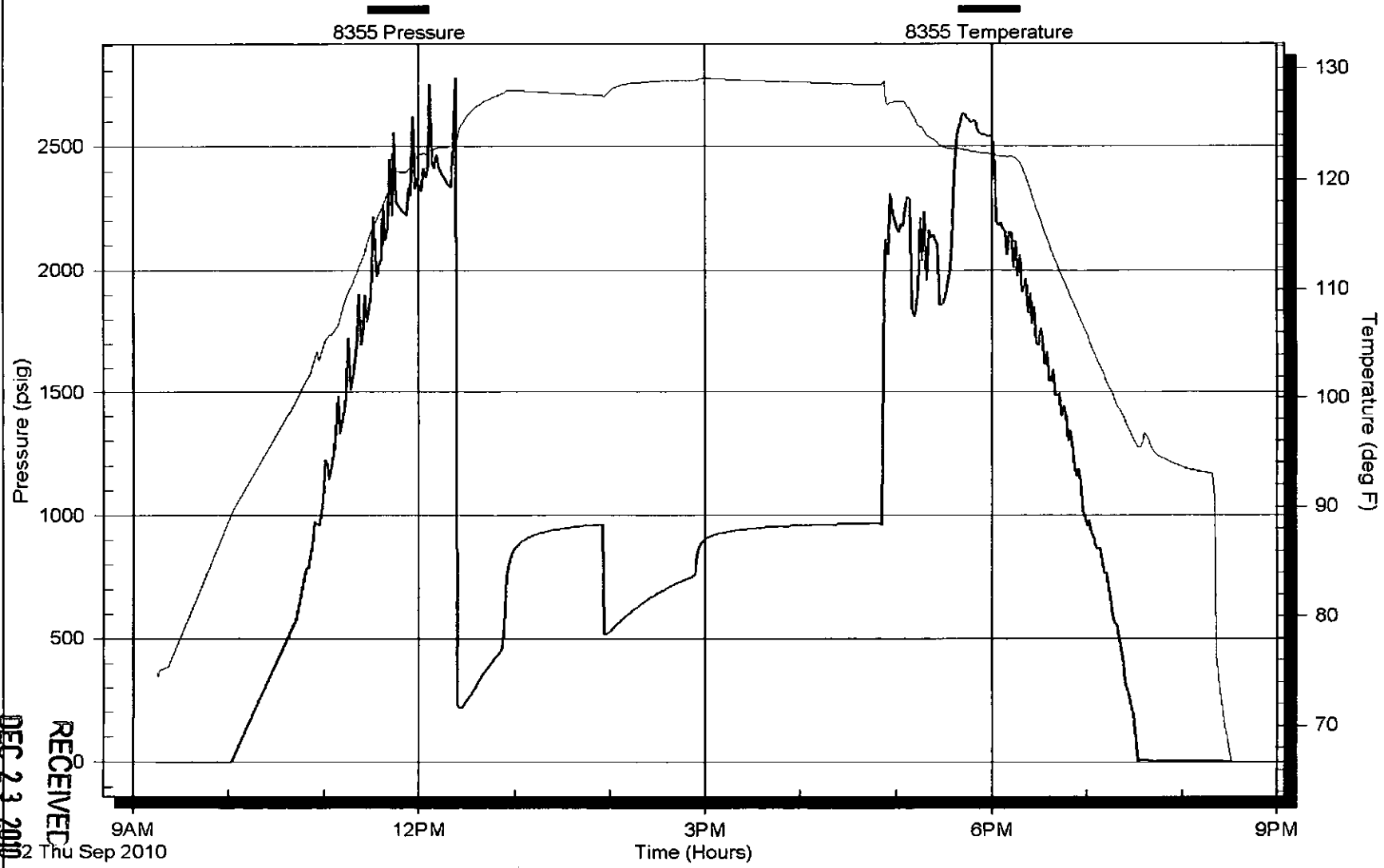
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### Pressure vs. Time



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