

Kansas Corporation Commission Oil & Gas Conservation Division

170394

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R 🗌 East 🗌 West
Address 2:	Feet from North / South Line of Section
City:	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	County:
Name:	Lease Name: Well #:
Wellsite Geologist:	Field Name:
Purchaser:	Producing Formation:
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	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: sx cmt.
If Workover/Re-entry: Old Well Info as follows:	
Operator: Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW	Chloride content: ppm Fluid volume: bbls Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled Permit #: Dual Completion Permit #: SWD Permit #:	Operator Name:
☐ ENHR Permit #: ☐ GSW Permit #:	County: Permit #:
Spud Date or Date Reached TD Completion Date or Recompletion Date	

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						
Letter of Confidentiality Received						
Date:						
Confidential Release Date:						
Wireline Log Received						
Geologist Report Received						
UIC Distribution						
ALT I II Approved by: Date:						

Side Two



Operator Name:				Lease l	Name: _			_Well #:		
Sec Twp	S. R	East	West	County						
INSTRUCTIONS: She time tool open and clo recovery, and flow rate line Logs surveyed. A	sed, flowing and shues if gas to surface to	t-in pressures st, along with	s, whether s final chart(s	hut-in press	sure read	ched static level,	hydrostatic press	sures, bottom h	nole temp	erature, fluid
Drill Stem Tests Taken (Attach Additional S		Yes	No			og Formatio	n (Top), Depth ar	nd Datum	;	Sample
Samples Sent to Geol	ogical Survey	Yes	No		Nam	е		Тор	[Datum
Cores Taken Electric Log Run Electric Log Submitted (If no, Submit Copy		Yes Yes Yes	No No No							
List All E. Logs Run:										
		Report a		RECORD	Ne	w Used	on, etc.			
Purpose of String	Size Hole Drilled	Size C Set (In		Weig Lbs. /		Setting Depth	Type of Cement	# Sacks Used		and Percent dditives
		Δ	ADDITIONAL	CEMENTIN	NG / SQL	 EEZE RECORD				
Purpose:	Depth	Type of (# Sacks Used Type and Percent Additives						
Perforate Protect Casing	Top Bottom									
Plug Back TD Plug Off Zone										
1 ldg 011 20110										
Shota Par Foot	PERFORATI	ON RECORD -	- Bridge Plug	s Set/Type		Acid, Fra	cture, Shot, Cemen	t Squeeze Recor	d	
Shots Per Foot	Specify	Footage of Each	h Interval Perf	orated		(Ai	mount and Kind of Ma	aterial Used)		Depth
TUBING RECORD:	Size:	Set At:		Packer A	t:	Liner Run:	Yes No			
Date of First, Resumed	Production, SWD or EN	_	roducing Meth	nod:	g 🗌	Gas Lift C	Other (Explain)			
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wate	er B	bls.	Gas-Oil Ratio		Gravity
DISPOSITIO	ON OF GAS:	'	ħ.	METHOD OF	COMPLE	TION:		PRODUCTION	ON INTER	VAI ·
Vented Sold		Oper	n Hole	Perf.	Dually	Comp. Cor	nmingled			
(If vented, Sub		O+b-	or (Specify)		(Submit)	ACO-5) (Sub	mit ACO-4)			

Form	ACO1 - Well Completion
Operator	Hess Oil Company
Well Name	McCurdy 1
Doc ID	1170394

Tops

Name	Тор	Datum		
Anhydrite	1590	+711		
Base Anhydrite	1630	+671		
Heebner	3711	-1410		
Toronto	3735	-1434		
Lansing	3754	-1453		
Stark Shale	3989	-1668		
Hushpuckney	4020	-1719		
Base Kansas City	4043	-1742		
Marmaton	4074	-1773		
Pawnee	4140	-1839		
Labette	4228	-1927		
Ft. Scott	4236	-1935		
Cherokee Shale	4252	-1951		
Cherokee B Sand	4278	-1977		
Lower Cherokee Sand	4327	-2026		
Mississipian	4373	-2072		
LTD	4396	-2095		
RTD	4400	-2099		





Scale 1:240 Imperial

Well Name: #1 McCurdy

Surface Location: 1600' FSL 950' FWL

Bottom Location:

API: 15-135-25666

License Number: 5663

Spud Date: 9/19/2013 Time: 3:10 PM

Region: Ness County sec 16 T17S R22W

Drilling Completed: 9/27/2013 Time: 12:00 AM

Surface Coordinates: 1600' FSL & 950' FEL

Bottom Hole Coordinates:

Ground Elevation: 2296.00ft K.B. Elevation: 2301.00ft

Logged Interval: 1550.00ft To: 4400.00ft

Total Depth: 4400.00ft

Formation: Lower Cherokee sandstone

Drilling Fluid Type: Chemical mud

OPERATOR

Company: Hess Oil Company Address: PO Box 1009

McPherson, KS 67460

Contact Geologist: James C. Hess Contact Phone Nbr: (620) 241-4640 Well Name: #1 McCurdy

Location: 1600' FSL _950' FWL API: 15-135-25666
Pool: Wildcat Field: Wildcat
State: Kansas Country: United States

ELEVATIONS

K.B. Elevation: 2301.00ft Ground Elevation: 2296.00ft

K.B. to Ground: 5.00ft

CONTRACTOR

Contractor: Company Tools

Rig #:

Rig Type: Standard Double

 Spud Date:
 9/19/2013
 Time:
 3:10 PM

 TD Date:
 9/27/2013
 Time:
 12:00 AM

 Rig Release:
 9/29/2013
 Time:
 9:00 AM

LOGGED BY

Company: S.L.E

Address: 225 N. Market Suite 300

Wichita, KS 67202

Phone Nbr: (620) 953-2066

Logged By: Geologist Name: Seth L. Evenson

SURFACE CO-ORDINATES

Well Type: Vertical

Longitude: -99.7678917 Latitude: 38.5716547

N/S Co-ord: 1600' FSL E/W Co-ord: 950' FEL

CASING SUMMARY

Surface Intermediate Main

Bit Size Hole Size

> Size Set At # of Joints **Drilled Out At** Type

Surf Casing 8 5/8 in 217 ft 9/20/2013 5:00 AM na na

Int Casing na in na ft na na

5 1/2 in 4394 ft J-55 107 10/7/2013 2:00 PM **Prod Casing**

CASING SEQUENCE

Hole Size Casing Size Type Αt 0.00 in 0.00 ft 0.00

OPEN HOLE LOGS

Logging Company: Pioneer

Logging Engineer: Robert Barnhart

Truck #: 15

Logging Date: 9/28/2013 Time Spent: 2 2

Logs Run: # Logs Run Successful: 2

LOGS RUN

Tool Logged Interval Logged Interval Remarks Run# Hours

3600.00ft 2.00 **Dual Compensa** 4375.00ft **Dual Induction** 217.00ft 4395.00ft 2.00 1

LOGGING OPERATION SUMMARY

Date From To **Description Of Operation**

9/28/2013 4396.00ft 0.00ft

NOTES

DST #1 DST #2 DST #3

4202'-4265' 4264'-4318' 4290'-4341'

30-30-15-pulled test 45-45-45-60 60-60-60-90

IHP 2082# IHP 2129# IHP 2146# IFP 29#-141# IFP 23#-29# IFP 26#-126# ISIP 364# ISIP 341# ISIP 1285# FFP 29#-38# FFP 143#-196# FFP 139#-201# **FSIP NA FSIP 364#** FSIP 1300# FHP 2042# FHP 2087# FHP 2057#

Rec: Rec: Rec:

55' mud 70' MCW 200' GO (10% G, 90% O)

300' Wtr 120' SOCM (10% O)

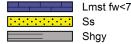
60' SOCWM (10% O, 30% W)

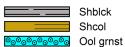
60' VSOCWM (5% O, 30% W)

40' GIP

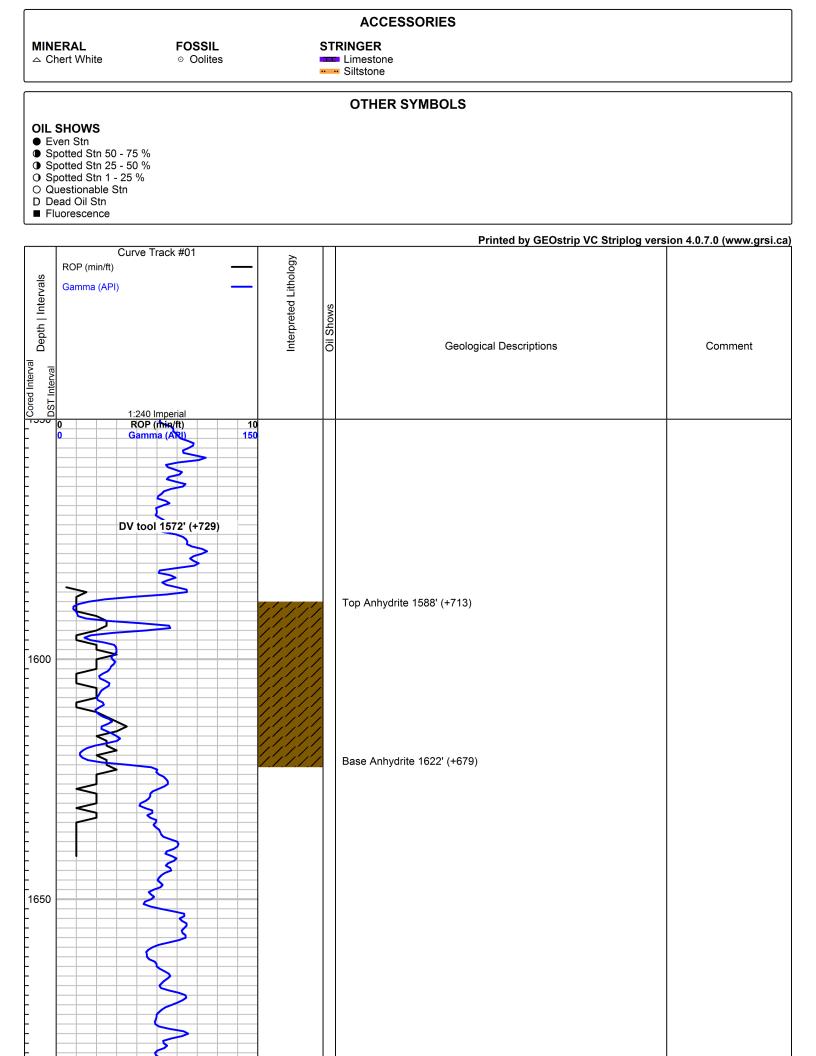


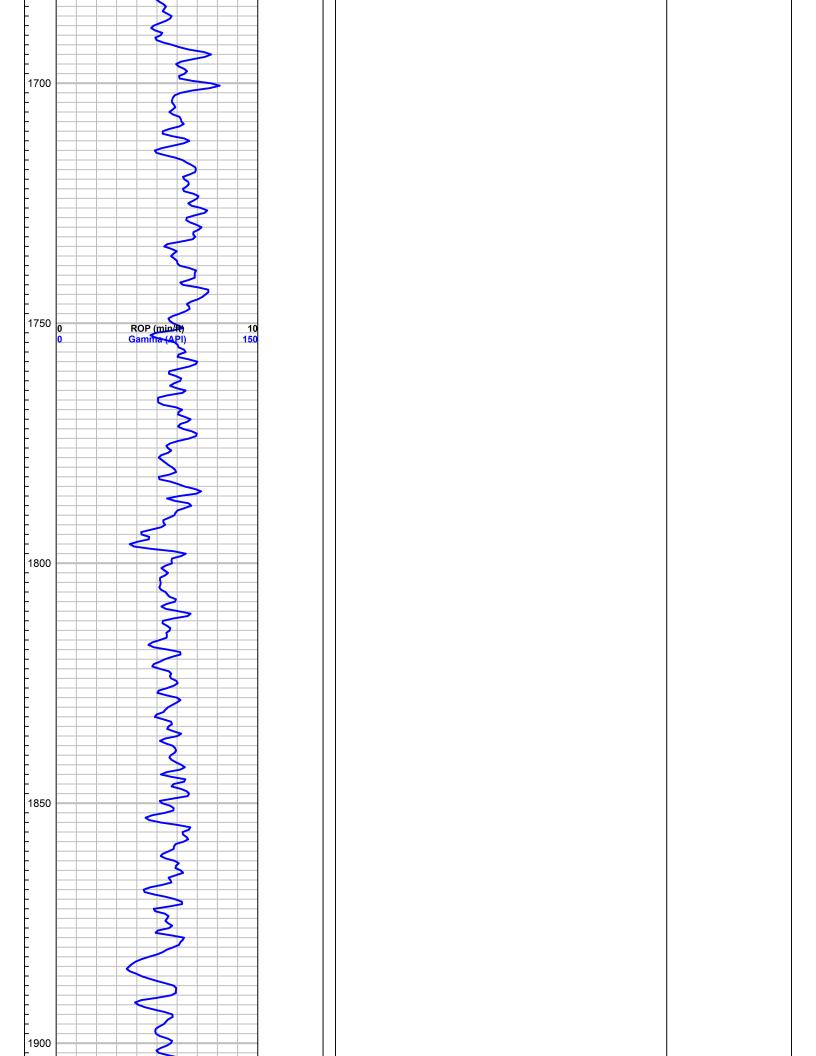


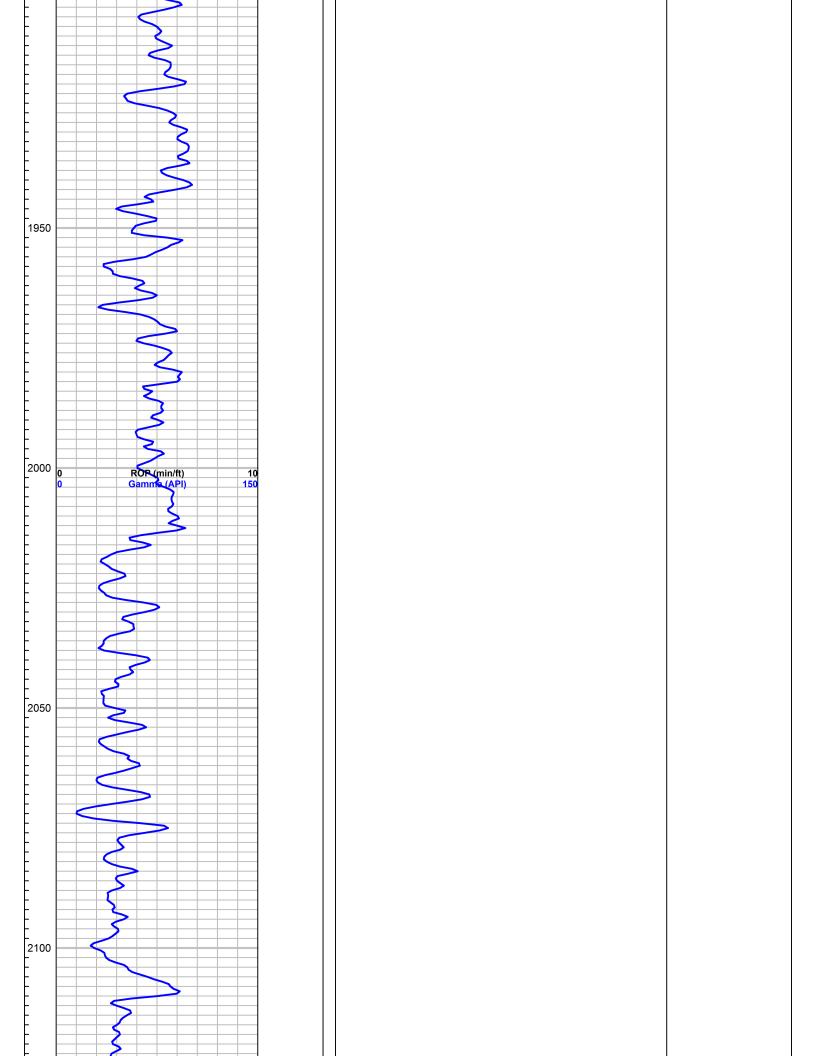


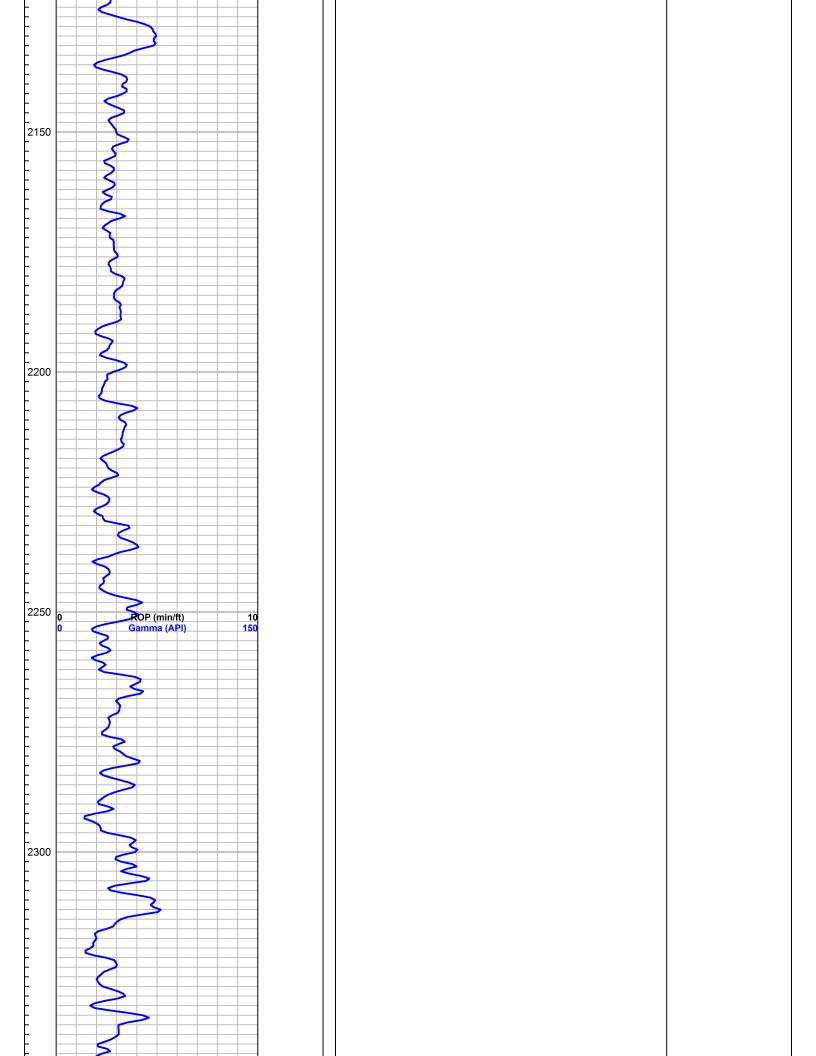


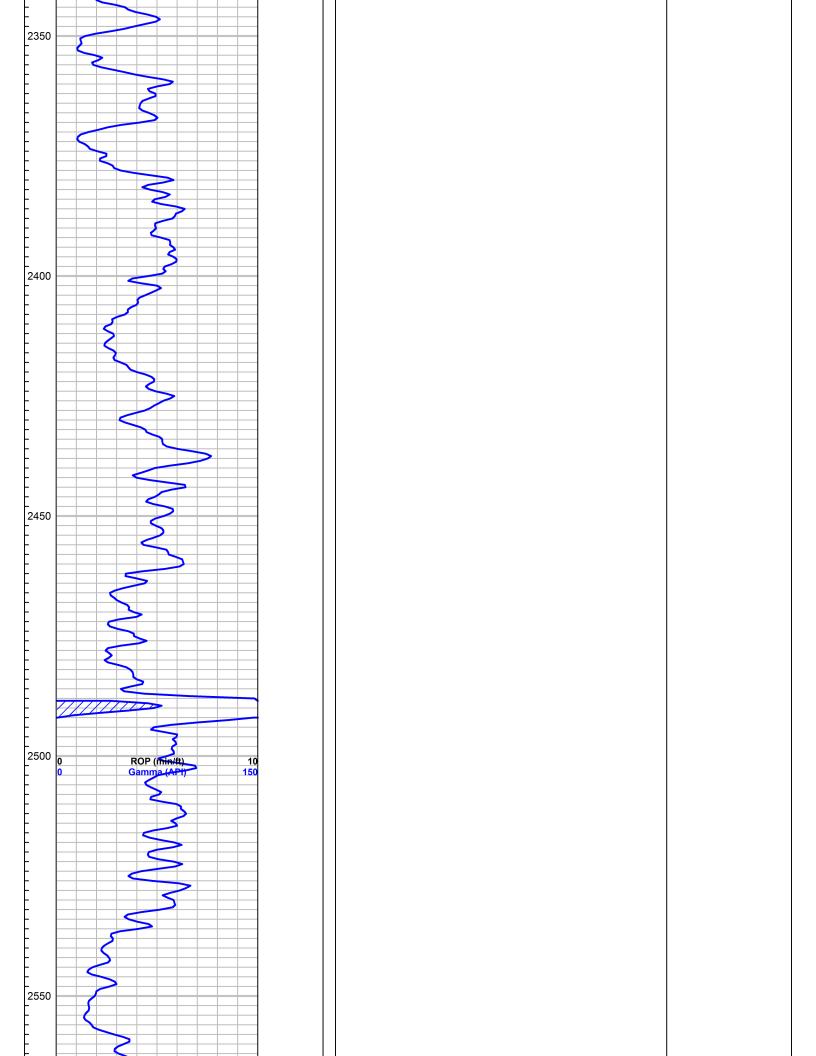


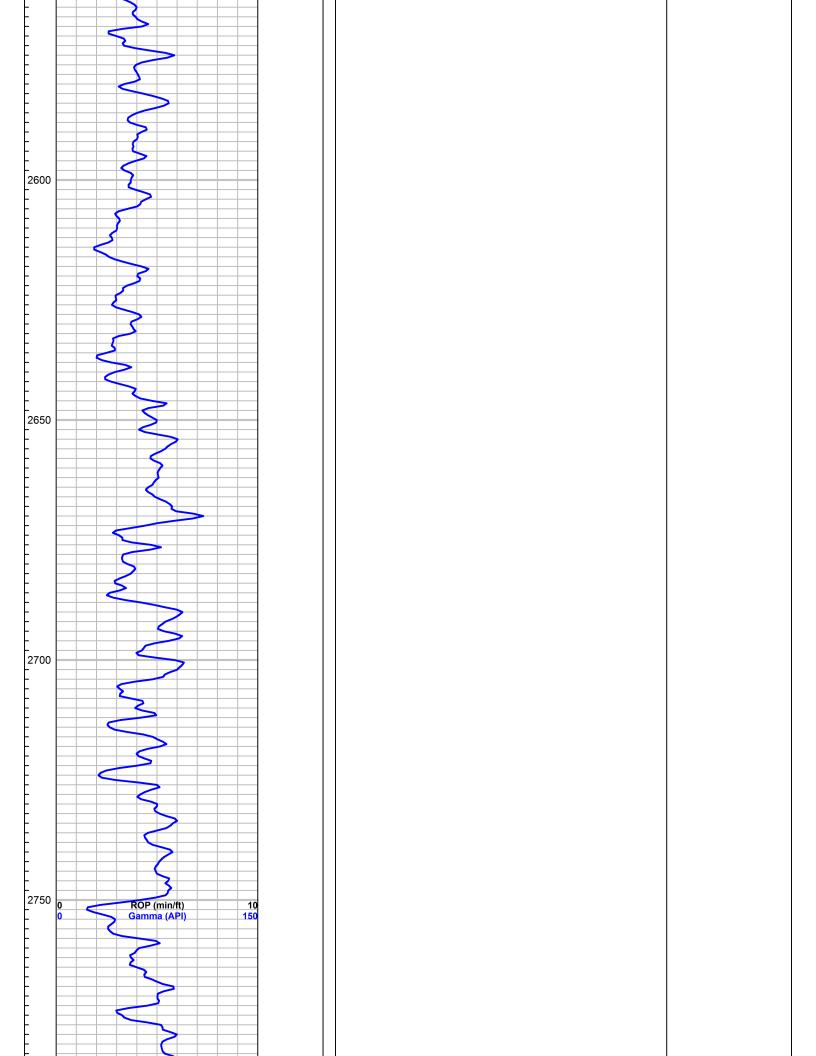


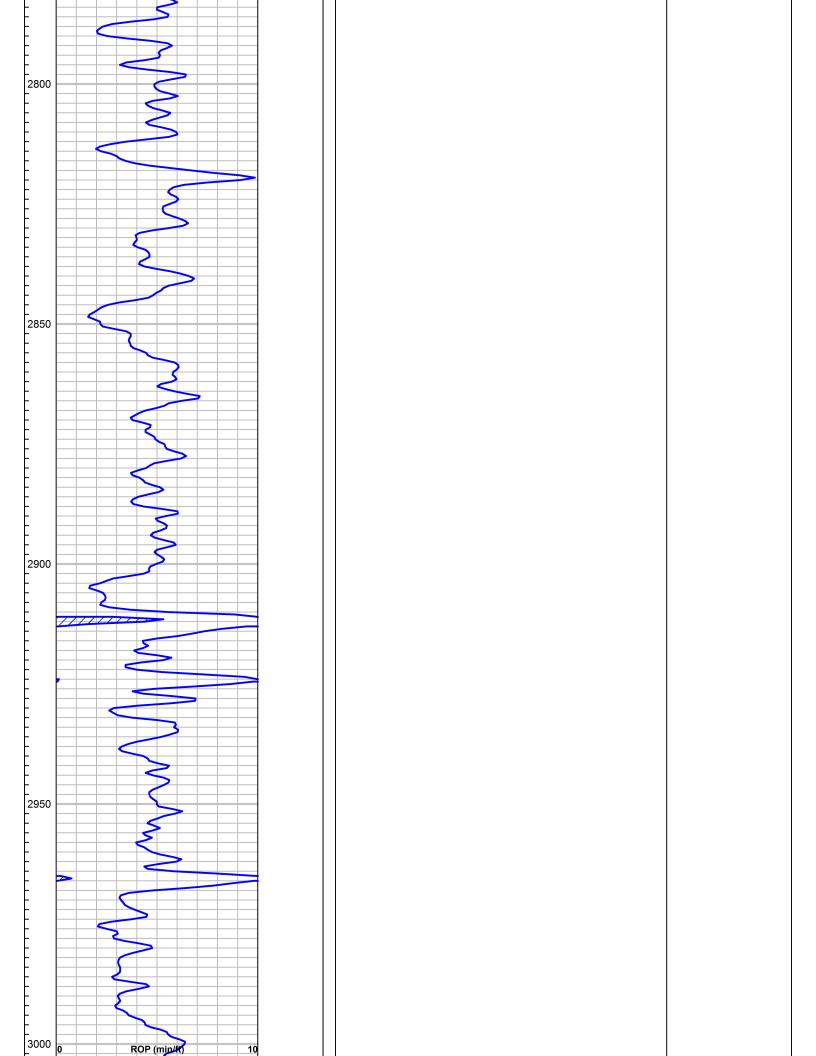


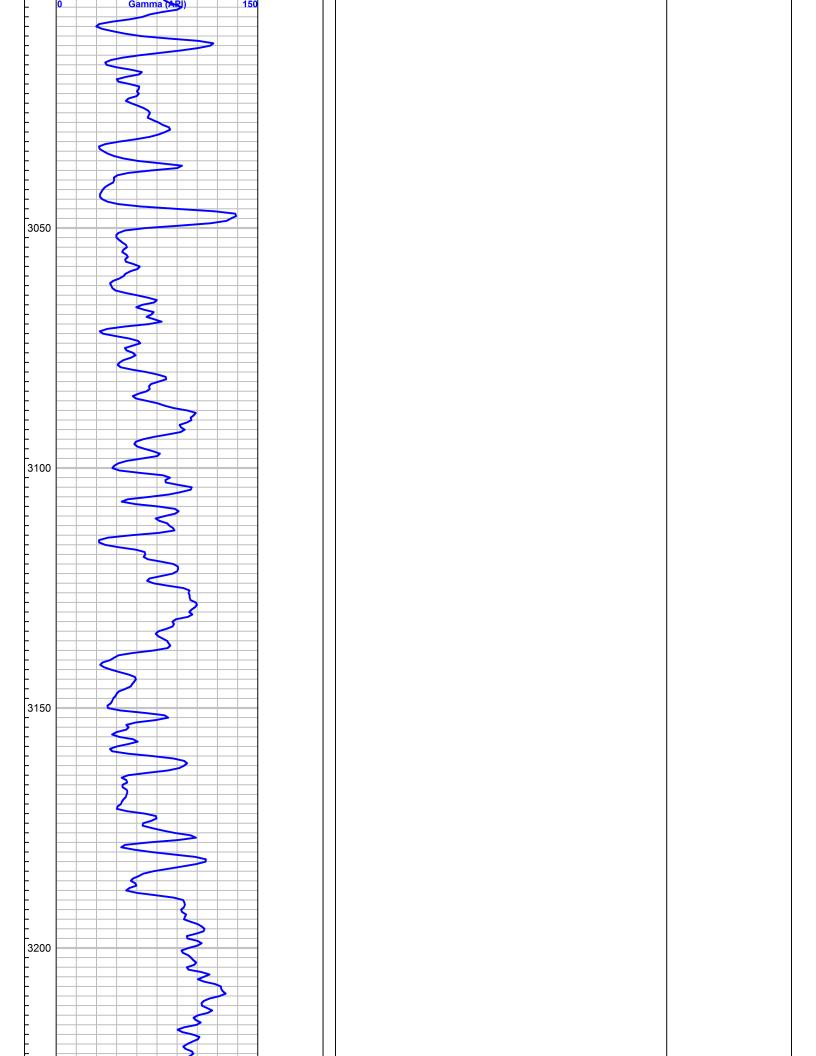


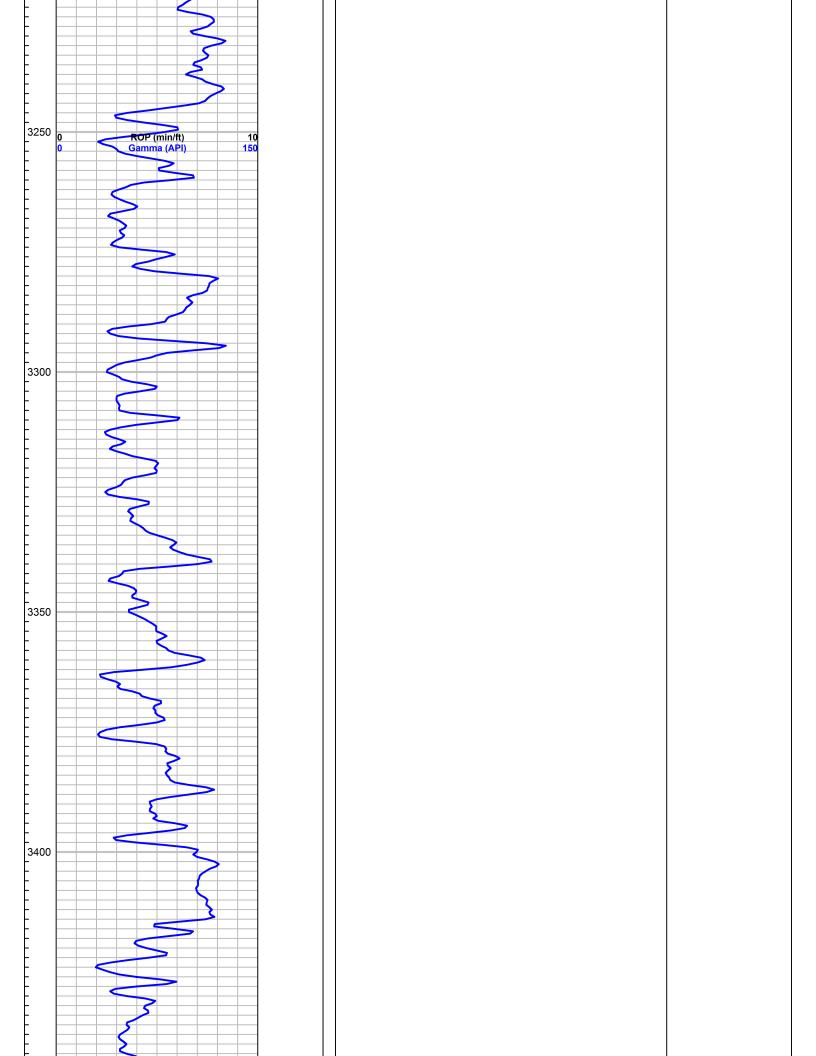


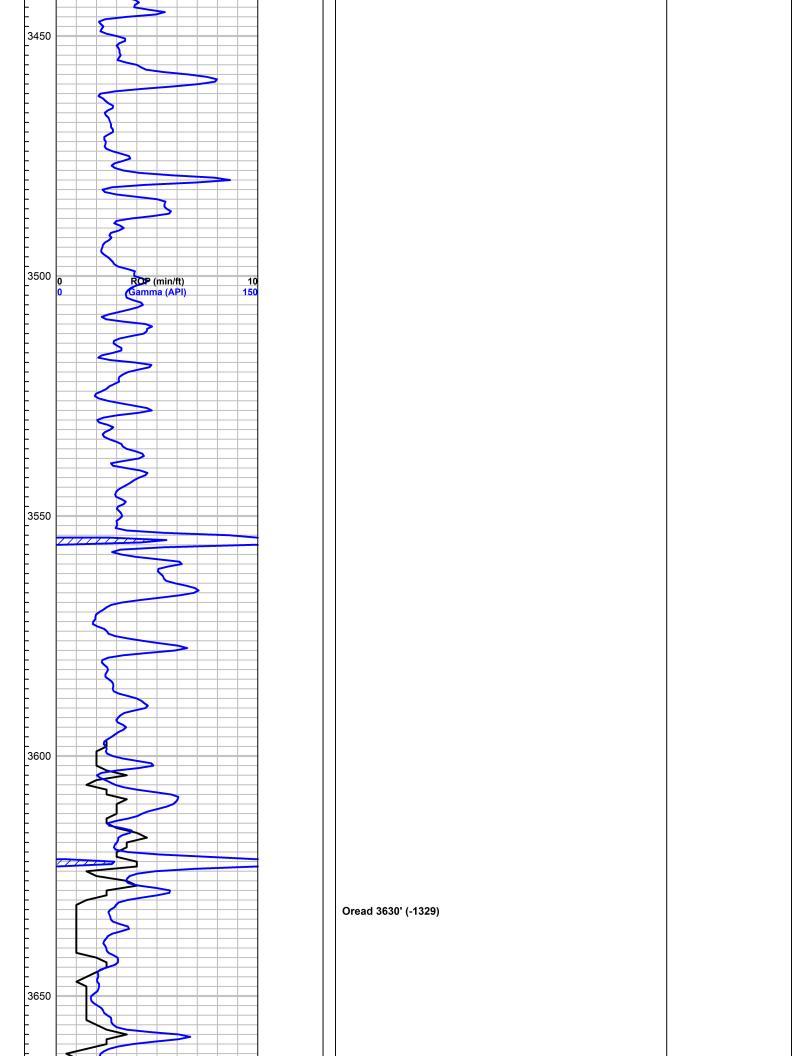


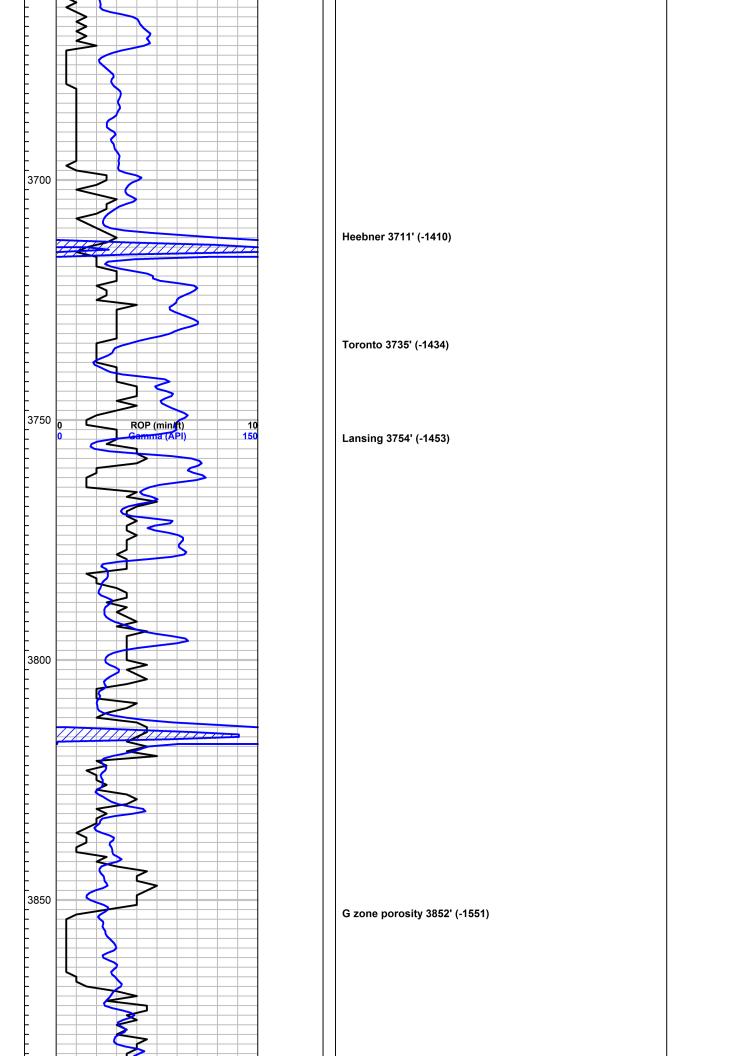


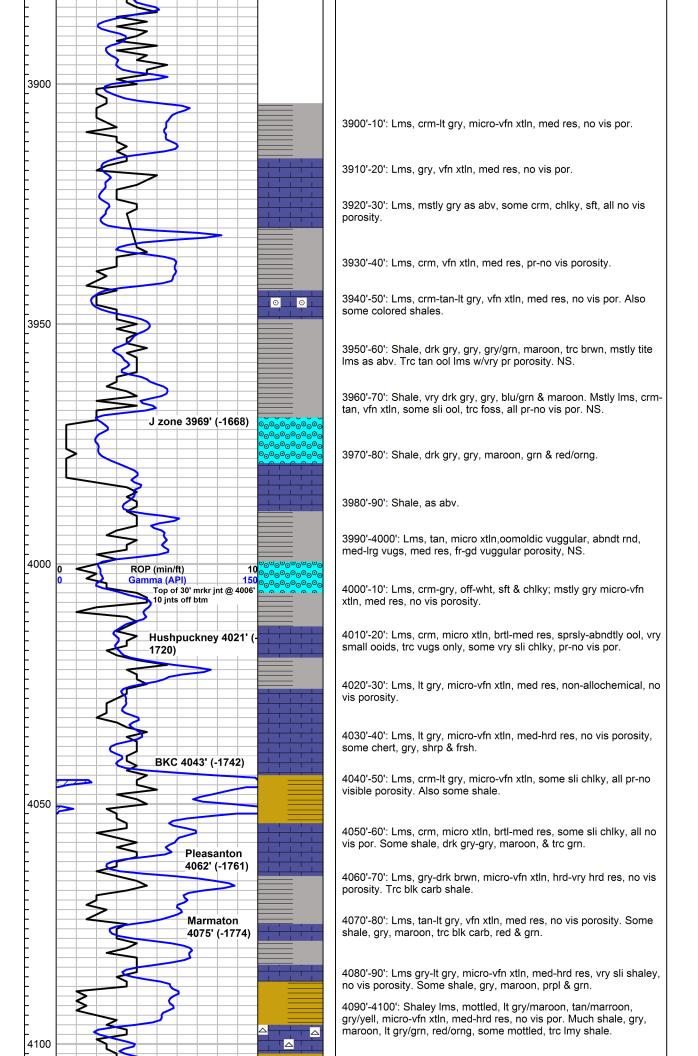


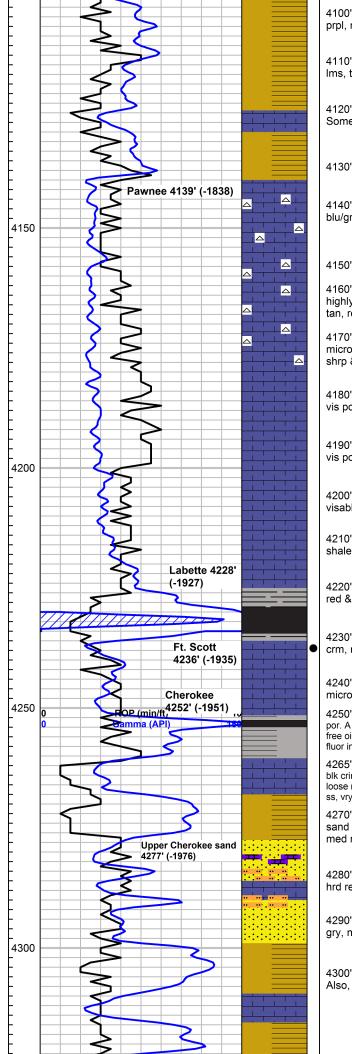












4100'-10': Shale, Imy shale & shaley Ims. Vari-colored as abv, gry, prpl, maroon, grn, red, yellow. All no vis porosity.

4110'-20': Shale, maroon, gry, prpl, trc gry/grn, sli earthy. Much lms, tan micro xtln, hrd res, smooth text, no vis porosity.

4120'-30': Lms, It gry-gry, micro-vfn xtln, med-hrd res, no vis por. Some chert, orng-orng/red, shrp frsh.

4130'-40': Lms & trc chrt as abv. Much shale, gry, prpl, trc blk.

4140'-50': Shale, gry, maroon, prpl, gry/grn, yell/grn, brwn, trc grn & blu/grn. Mst all sft shale. Also some chrt, tan, orng, red.

4150'-60': Lms, It gry-gry, micro-vfn xtln, med-hrd res, no vis por.

4160'-70': Lms, off-wht to crm, mst micro-vfn xtln, sft, chlky, some highly silicified lms vry hrd res. Much chrt, lt gry semi-trans, off-wht, tan, red/orng, sli yell/tan, shrp & frsh. All no vis porosity.

4170'-80': Lms, crm-lt gry, micro-vfn xtln, some sft & chlky, mst pcs micro xtln, hrd res, some sli silicified. Much chrt lt gry, off-wht, tan, shrp & frsh. All no vis porosity.

4180'-90': Lms, crm-tan-lt gry, micro xtln, hrd res, smooth text, no vis por. Trc shrp chrt.

4190'-4200': Lms, tan, micro-vfn xtln, hrd res, non-allochemical, no vis por. Some gry & maroon sft shale.

4200'-10': Lms, tan-gry, micro xtln, hrd res, non-allochemical, no visable porosity. Trace shale.

4210'-20': Shaley Ims, drk gry, micro xtln, hrd res no vis por. Abndt shale, gry, maroon, yell/grn, prpl.

4220'-30': Shale, drk gry, vry sli silty. Also small amount maroon, red & prpl shales. Trc loose, fn, rnd, reddish qtz grains.

4230'-40': Shale, gry, prpl, maroon, trc grn & yellow. Much lms, crm, micro xtln, tite, no visible porosity, mstly small pcs.

4240'-50': Shale, blk, gry, maroon, prpl, grn. Some lms, crm-lt gry, micro xtln, med-hrd res, some sli chlky, no vis porosity.

4250'-60': Lms, crm-lt gry, micro-vfn xtln, med res, some sft, chlky, no vis por. A couple pcs lt gry lms w/fr scat lt brwn stn & sat, SSFO, lt tan droplets free oil on brk, fr-gd yell-brt wht fluor, gd strming cut, vry sli odr in cup. Stn & fluor in about 5% of pcs. Poor porosity.

4265'-70': Lms crm-lt gry, micro-vfn xtln, hrd res, some sli chlky/shaley w/crs blk crinoid foss. No vis por. Much shale in sample, may be trash. Vry abndt loose rnd fn-med qtz sand grains w/lt red/orng tint in tray. 1 clst fn grained tite ss, vry hrd res, NS.

4270'-80': Shale, gry, maroon, grn, trc red.vry much abndt loose qtz sand grains as circulated. A few clst qtz ss, gry-vry lt gry, sli shaley, med res, prly friable. pr-fr intr gran por. NS

4280'-90': Shale, maroon, gry, grn. Trc clst gry ss, vfn grained, vry hrd res, shaley, no vis por. 1 pc clr vry crs, sub ang qtz grain.

4290'-4300': Lms, crm, tite, as circulated. Also increase in shale, gry, maroon, grn, prpl & some blk carbonaceous, brtl.

4300'-10': Shale, gry, maroon & grn, some blk, sli carbonaceous. Also, some sli shaley lms as abv. No vis por.

Short trip @ 4180' CTCH 1.25

4230' CFS 20 min: Shale drk gry, much sli lmy, hrd res. Also maroon, blu/grn, red/orng & prpl shales. Some lms crm tite, no vis

4230' CFS 40 min: Shale, blk sli carbonaceous, much drk gry shale. Many small chips crm Ims as abv.

4230' CFS 60 min: Shale, gry, maroon, grn. Some blk carb shale as abv. Also Ims, gry hrd tite & crm micro xtln, med-hrd res, no vis por.

4240' CFS 20 min: Shale, blk, drk gry, maroon, prpl, etc.

4240' CFS 40 min: Shale, blk carbonaceous, sft-med res, sli

4240' CFS 60 min: Shale, drk gry, blk, maroon, prpl, etc. Many small chips lms, crm, tite & chrt shrp, frsh

4265' Sample: Lms, lt gry-tan, vfn xtln, med res, sli-FSFO, mstly pr, but a few w/fr scat intr xtln/spicular vugs. Fluor in 8%

d265' CFS 20 min: Lms, crm-lt gry, micro-vfn xtln, med-hrd res, mst pr-no vis por.Lms w/shw as abv, less than 3% of pcs, loosing

4265' CFS 40 min: Lms, crm-lt gry, micro-vfn xtln, mstly hrd res, pr-no vis por. Scat wk, lv stn & brt wk fluor in about 5% pcs. pr vry sprs pnpnt intr xtln porosity at best in some pcs.

4265' CFS 60 min: Lms gry, micro-vfn xtln, med-hrd res, vry sli chlky, pr-no vis por. 1 pc w/ vgd lv stn in fr vuggy por, from up-hole.

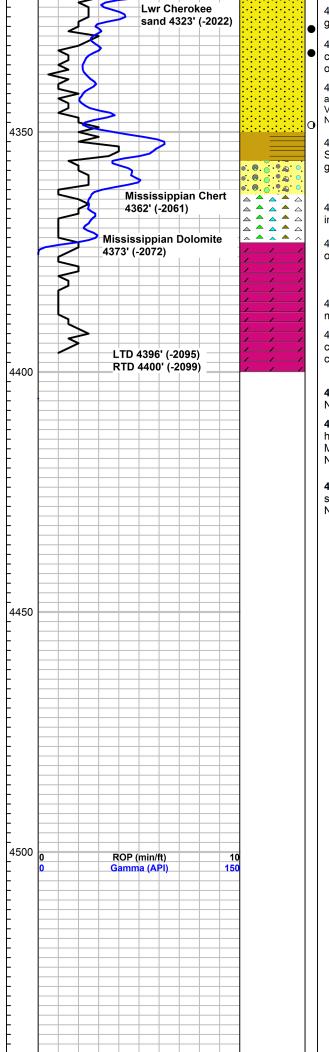
4275' CFS 20 min; Shale, Irg chips gry, maroon & blu gry. Mstly finer pcs Ims crm, tite as

4275' CFS 40 min: Shale, gry, maroon, It gry, red, blu/gry. Some sitly. Some It blu/gry sndy shale & shaley ss. med sub rnd grains, abndt clay matrix, brtl-med res. NS. Abndt loose qtz sand grains in tray. Increase in crs grains.

4275' CFS 60 min: Shale gry, maroon, prlp, grn. Several clst ss, lt grn/gry, shaley, fn-med qtz grains, brtl-med res, semi-fri, NS. one clst made of abndt ambr colored long shaft shaped xtls, brlt w/wht matrix pr-no vis por. NS

4280' CFS 20 min: Shale as abv. Much loose sand grains as abv. NS

4280' CFS 40 min; Mixed shale



4318'-30': Shale, vari-colored, gry, drk gry, prpl, maroon, grn, grn/yellow, red. Also, vari-colored sli shaley lms, no vis por.

4330'-40': Shale, vari-colored as abv. Many pcs mottled. Also vari-colored shaley lms/lmy shale, no vis por. Trc chrt, drk tan, red-orng, off-wht, shrp & frsh.

4340'-50': Much trip trash shale. Some chrt, sli tripolitic, off-wht to yell/tan as abv. Med-hrd res. Trc pcs w/scat blk sptd edge stn, trc small vry sprs vugs. Vry pr vis por, wk-fr dull yell/grn fluor. Fr strming cut on brk only. Trc sndy chrt, NS.

4350'-60': Chrt & sale, vari-colored. Chrt, off-wht, tan, yell, red/orng. Shrp & frsh, NS. trc ool colored chrt. Shale, gry, marroon, prpl, red, grn, some mottled. Likely conglomeritic section.

4360'-70': Vari-colored shale & chrt as abv. Poss trc dead spty stn in some pcs ool chrt, NSFO. Otherwise NS.

4370'-78': Vari-colored shale as abv. Much shrp & frsh chrt, mstly off-wht, tan & yellowish. NS.

4378'-90': Dolomite, tan-lt gry, vfn xtln, med res, no vis por. Chrt, mstly off-wht, also tan to yellowish, shrp & frsh no vis por.

4390'-4400': Dolomite, crm-tan vfn xtln, no vis por, as abv. Also chrt, increase in sli tripolitic, off-wht, crm, yellowish. 1 small pc trip chrt w/FSFO on brk, brtl, likely from uphole. Rest no show.

4400' CFS 20 min: Dolomite, crm, fn xtln, med res, pr-no vis por. NS. Much chrt off-wht to vry lt gry & semi trans lscnt, shrp & frsh.

4400' CFS 40 min: Dolomite crm-tan sft-med res, some drk brwn hrd res. vfn xtln, pr-fr intr xtln por. pr-no vis por in hrd brwn pcs. NS. Much chrt, off-wht,crm- tan, mst shrp &frsh some sli weathered, NS.

4400' CFS 60 min: Dolomite, tan-drk brwn, fn-med xtln, hrd res, sli silicaceos, pr vis por. A few pcs tan dolo w/scat med sized vugs. NS. Much chert, off-wht, tan, It gry, shrp & frsh as abv.

grains, trc tiny clst. NS. Some silty shale. 4280' CFS 60 min: Shale, maroon, gry, gry/grn & prpl.

4290' CFS 20 min: Lms crm, micro-vfn xtln, med res, pr-no vis

4290' CFS 40 min: Lms, crm, micro-vfn xtln, med-hrd res, some sli chlky, all no vis por.

4300' CFS 20 min: Lms, off-wht to crm, micro-vfn xtln, some sli chlky, med res, all no vis por. A few pcs It gry micro xtln, sli shaley lms w/smooth texture, no

4300' CFS 40 min: Lms, mstly crm as abv, much It gry & brwn, micro-vfn xtln, med-hrd res, sli shaley, gry pcs oftn sli gluac, no vis nor

vis por. 4300' CFS 60 min: Lms gry, brwn, trc prpl & yell/grn, sli shaley lms, micro-vfn xtln, hrd res, no vis por. Increase in shales, gry, maroon, prpl, grn, blk

4315': Mix of vari-colored shales, & shaley Ims as abv. Also much crm colored Ims as abv, all no vis por.

4315' CFS 20 min: Mix of shale & tite Ims as aby, NS.

4315' CFS 40 min: Lms, sli shaley, gry, tan, brwn, lt grnish/sli glauc, yellowish. Micro-vfn xtln, hrd res, no vis por. Also shale as abv.

4315' CFS 60 min: Shale, gry, maroon, grn, some blk carb, brtl. Trc vivid yellow conglomeritic looking shale.

4318' CFS 40 min: Shale, varicolored, gry, maroon, prpl, blk, grn, blu/grn, yellow.

4318' CFS 60 min: Vari-colored shales, great increase in grn, prpl, & turquoise shales. Some mottled shale. Trc vari-colored shaley lms.

4341' CFS 20 min: SS, offwht/clt, fin grained, sub ang, well std, fr well cmntd many pcs friable, gd overall intr gran por. Fi even Iv brwn stn & sat, gd dull yell/grn even fluor, Gd shw film rainbow oil on brk, some scat flky drk brwn stn on brk, fr-gd strming cut on brk, gd bloom. 1 pc trip chrt, med res w/ gd Iv oil stn in intrnal pinpnt vugs. No odr.

4341' CFS 40 min: SS, clr fnmed grained, cln, fr-well srtd. Med-hrd res firm, but many pcs sli friable to vry easily friable frgd intr granular por. Fr, vry even It stn & sat mst pcs. FSFO, brwn free oil on brk. Some gassy free oil, occ flky stn. Gd vry even dull yell fluor. Gd-vgd strming cut on brk, Fr-excln bloom, vry sli odr in cup. Sample mstly chrt, off-wht to wht tripolitic, med res, pr-no vis por. Trc pcs trip chrt w/uneven blk dead stn on edges. Mstly no show in chrt. Also much shrp & frsh chrt, tan to off-wht/yellowish tint to It yellow. A few pcs w/ss & chrt attached.

4341' CFS 60 min: SS & chrt as abv. SS is hrdr, more tightly cmntd & trc-SSFO only in mst sat pcs. Still well sat mst pcs. fluor as abv, Sli to gd strming cut. Instant cut & vry thick nlm on brk. Mst hrd pcs appear to have vry good internal sat. Much chrt as abv, no shw in chrt. Vry sli odor in cup.

4355': Vry much vari-colored shale & ss w/shw from abv. A few pcs hrd res trip chrt w/scat lv to dead stn. 1 pc w/FSFO, unable to brk, vry hrd, vry pr vis por. Mst chrt NS. trc sndy chrt as abv..

4355' CFS 20 min: Chrt, vry sli tripolitic. Off-wht, bone, scat vry lt yell spts to lt yellowish/tan. Shrp, hrd res, mst no vis por & no shw. A few pcs w/pr vry sprs dead stn.

- 4550 - - - - - -							4355' CFS 40 min: Chrt, mstly, off-wht, tan, yellow, trc red/orng. Shrp & frsh. several pcs w/ry scat sprs, dead blk edge stn, NSFO. Trc ool chrt w/med-Irg rnd vugs, fr blk stn, fr strming cut. Much ss, clr, fn-med grnd, med-hrd res, fr-gd even blk stn, FR-GSFO on brk some pcs, much more blk flaky stn than abv. Lacking even brwn sat & stn.
							4355' CFS 60 min: Chrt & shale, vari-colored. Chrt, off-wht, tan, yellow & trc It grn, also red/orng ool. Several clst It gry ss, fn grained well srtd, hrd res, tite clst w/pr-fr por. Scat pinpnt blk stn in intr gran por to gd frly even gry-blk stn. GSFO on brk. SS differs from that at top of porosity, especially in stn and free oil show. Trc gd scat blk stn & fr strming cut in chrt.
-							4378' CFS 20 min: Chrt, off-wht, crm, tan, sli yellow. Mstly shrp & frsh. Some sli tripolitic.
4600							4378' CFS 40 min: Dolo & chrt. Dolo, crm, vfn xtln, med-hrd res, pr-no vis por. NS. Chrt, wht, off- wht, tan, mstly shrp & frsh. Some sli tripolitic weathered chert.
- - - -							



Hess Oil Comp

p.o. box 1009

67460-1009

McPherson, Ks

16-17s-22w Ness, Ks

McCurdy #1

Tester:

Job Ticket: 54635

DST#: 1

ATTN: Seth Evenson

Test Start: 2013.09.25 @ 13:43:48

55

Shane McBride

GENERAL INFORMATION:

Formation: Cherokee

Deviated: Test Type: Conventional Bottom Hole (Initial) No Whipstock: 0.00 ft (KB)

Time Tool Opened: 16:03:43 Time Test Ended: 19:20:57

Interval:

Unit No: 4202.00 ft (KB) To 4265.00 ft (KB) (TVD) Reference Elevations:

Total Depth: 4265.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair Hole Diameter:

2301.00 ft (KB)

2296.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8368 Outside

Press@RunDepth: 4203.00 ft (KB) 29.27 psig @ Capacity: 8000.00 psig

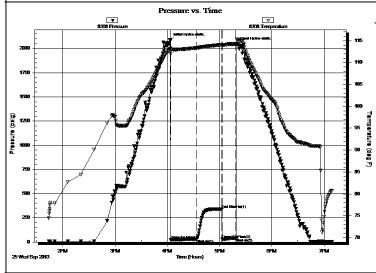
Start Date: 2013.09.25 End Date: Last Calib.: 2013.09.25 2013.09.25 Start Time: 13:43:48 End Time: 19:08:57 Time On Btm: 2013.09.25 @ 16:03:28 Time Off Btm: 2013.09.25 @ 17:19:58

TEST COMMENT: 3/4"in blow

No return

No blow, Flush tool after 5 min. 1/4"in surge, died in 7 min.

Pull tool



PΙ	RESSUR	RE SI	JMMA	RY

Time	Pressure	lemp	Annotation
(Min.)	(psig)	(deg F)	
0	2082.24	113.25	Initial Hydro-static
1	23.52	111.92	Open To Flow (1)
31	29.27	113.35	Shut-In(1)
60	341.28	114.08	End Shut-In(1)
60	29.02	113.85	Open To Flow (2)
76	38.72	114.25	Shut-In(2)
77	2042.63	115.27	Final Hydro-static

Recovery

Description	Volume (bbl)		
mud 100%m	0.27		
	Description mud 100%m		

Gas Rates

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

Trilobite Testing, Inc Ref. No: 54635 Printed: 2013.09.26 @ 07:42:34



FLUID SUMMARY

0 ppm

Hess Oil Comp

16-17s-22w Ness, Ks

p.o. box 1009 McPherson, Ks McCurdy #1

Job Ticket: 54635

Serial #:

DST#:1

WicPherson, Ks 67460-1009

Test Start: 2013.09.25 @ 13:43:48

ATTN: Seth Evenson

Mud and Cushion Information

Mud Type: Gel Chem Cushion Type: Oil API: 0 deg API

Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity:

Viscosity: 52.00 sec/qt Cushion Volume: bbl

Water Loss: 6.40 in³ Gas Cushion Type:

Resistivity: 0.00 ohm.m Gas Cushion Pressure: psig

Salinity: 4900.00 ppm Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
55.00	mud 100%m	0.270

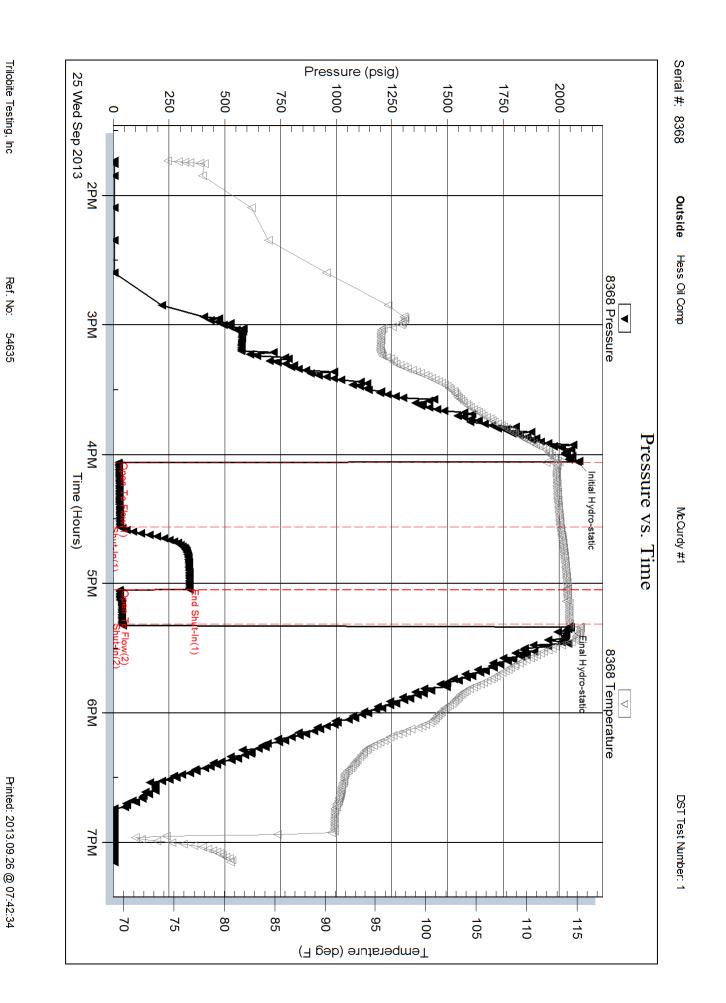
Total Length: 55.00 ft Total Volume: 0.270 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0

Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 54635 Printed: 2013.09.26 @ 07:42:34





Hess Oil Comp

p.o. box 1009

67460-1009

McPherson, Ks

16-17s-22w Ness, Ks

McCurdy #1

Tester:

Unit No:

Job Ticket: 54636

DST#: 2

2301.00 ft (KB)

2296.00 ft (CF)

ATTN: Seth Evenson

Test Start: 2013.09.26 @ 10:55:54

55

Reference Elevations:

GENERAL INFORMATION:

Formation: Lower Cherokee

Deviated: Whipstock: Test Type: Conventional Bottom Hole (Reset) 0.00 ft (KB)

Time Tool Opened: 13:17:34 Time Test Ended: 18:55:03

Interval:

Total Depth: 4318.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair KB to GR/CF: Hole Diameter: 5.00 ft

Shane McBride

Serial #: 8368 Outside

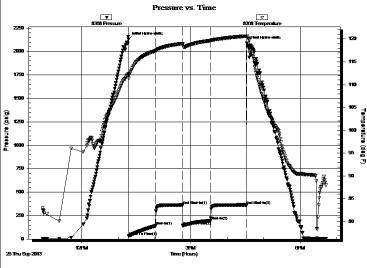
Press@RunDepth: 196.82 psig @ 4265.00 ft (KB) Capacity: 8000.00 psig

Start Date: 2013.09.26 End Date: 2013.09.26 Last Calib.: 2013.09.26 Start Time: 10:55:54 End Time: 2013.09.26 @ 13:17:19 18:43:03 Time On Btm: Time Off Btm: 2013.09.26 @ 16:32:33

TEST COMMENT: 11 1/2"in blow

No return 5 1/4"in blow No return

4264.00 ft (KB) To 4318.00 ft (KB) (TVD)



PRESSURE SUMMARY												
1	Time	Pressure	Temp	Annotation								
	(Min.)	(psig)	(deg F)									
	0	2129.76	112.36	Initial Hydro-static								
	1	29.93	111.31	Open To Flow (1)								
	45	141.08	117.39	Shut-In(1)								
	89	364.05	118.99	End Shut-In(1)								
	90	143.43	118.81	Open To Flow (2)								
	135	196.82	119.64	Shut-In(2)								
,	194	364.43	120.62	End Shut-In(2)								
,	196	2087.15	120.54	Final Hydro-static								

DDECCLIDE CLIMANA DV

Recovery

Length (ft)	Description	Volume (bbl)
300.00	water 100%w	1.48
70.00	m c w 15%m 85%w	0.46
* Recovery from mult	iple tests	

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

Gas Rates

Trilobite Testing, Inc Ref. No: 54636 Printed: 2013.09.26 @ 23:18:27



FLUID SUMMARY

Hess Oil Comp 16-17s-22w Ness, Ks

p.o. box 1009 McCurdy #1
McPherson, Ks

OST#: 2 Job Ticket: 54636 DST#: 2

ATTN: Seth Evenson Test Start: 2013.09.26 @ 10:55:54

Mud and Cushion Information

Mud Type: Gel Chem Cushion Type: Oil API: 0 deg API

Viscosity: 61.00 sec/qt Cushion Volume: bbl

Water Loss: 7.97 in³ Gas Cushion Type:

Resistivity: 0.00 ohm.m Gas Cushion Pressure: psig

Salinity: 5000.00 ppm Filter Cake: 1.00 inches

Recovery Information

Recovery Table

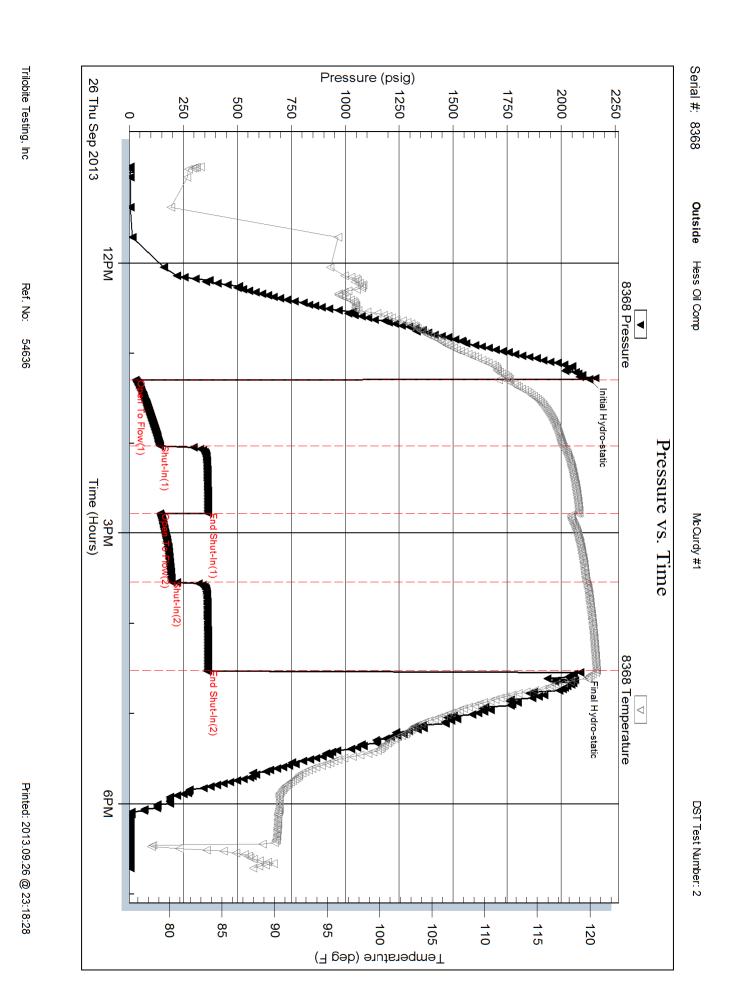
Length ft	Description	Volume bbl
300.00	water 100%w	1.475
70.00	mc w 15%m85%w	0.463

Total Length: 370.00 ft Total Volume: 1.938 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location: Recovery Comments: rw .225 @ 77*f = 28,000 chlor

Trilobite Testing, Inc Ref. No: 54636 Printed: 2013.09.26 @ 23:18:27





Hess Oil Co.

16-17s-22w Ness

PO Box 1009

McCurdy #1 McPherson Ks 67460+1009 Job Ticket: 53628

ATTN: Seth Evanson

Test Start: 2013.09.27 @ 03:00:01

GENERAL INFORMATION:

Formation: Miss

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:02:30 Time Test Ended: 12:51:30

4290.00 ft (KB) To 4341.00 ft (KB) (TVD) Interval:

Total Depth: 4341.00 ft (KB) (TVD)

7.88 inches Hole Condition: Poor Hole Diameter:

Test Type: Conventional Bottom Hole (Initial)

Andy Carreira

Unit No: 68

Tester:

Reference Elevations: 2301.00 ft (KB)

DST#: 3

2296.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8372 Inside

Press@RunDepth: 4295.00 ft (KB) 201.96 psig @ Capacity: 8000.00 psig

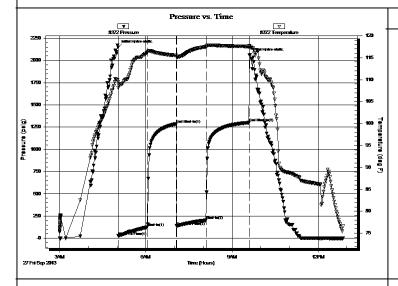
Start Date: 2013.09.27 End Date: 2013.09.27 Last Calib.: 2013.09.27 Start Time: 03:00:01 End Time: 12:51:30 Time On Btm: 2013.09.27 @ 05:02:00 Time Off Btm: 2013.09.27 @ 09:36:30

TEST COMMENT: IF:(60min) 2" blow in 6 min. 6" in 23 min. 8" in 33 min. BOB in 51 min.

ISI:(60min) No Return

FF:(60min) 2" blow in 15 min. 6" in 34 min. 8" in 46 min. 11" in 60 min.

FSI:(120min) Intermittent return surface blow



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

DDESCLIDE CLIMMADV

111110	110000010	1 CITIP	7111101411011
(Min.)	(psig)	(deg F)	
0	2146.76	109.47	Initial Hydro-static
1	26.76	108.13	Open To Flow (1)
61	126.04	116.17	Shut-In(1)
122	1285.69	115.50	End Shut-In(1)
122	139.28	115.12	Open To Flow (2)
184	201.96	117.47	Shut-In(2)
274	1300.43	117.54	End Shut-In(2)
275	2057.27	117.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCWM o=5% w =30% m=65%	0.30
60.00	OCWM o=10% w =30% m=60%	0.30
120.00	OCM o=10% m=90%	0.59
200.00	GO g=10% o=90%	1.18

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Trilobite Testing, Inc Ref. No: 53628 Printed: 2013.09.27 @ 13:35:36



FLUID SUMMARY

Hess Oil Co.

16-17s-22w Ness

PO Box 1009

McCurdy #1

Job Ticket: 53628

DST#:3

ATTN: Seth Evanson

McPherson Ks 67460+1009

Test Start: 2013.09.27 @ 03:00:01

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil A Pl:41 deg A PlMud Weight:9.00 lb/galCushion Length:ftWater Salinity:12000 ppm

Mud Weight:9.00 lb/galCushion Length:ftViscosity:62.00 sec/qtCushion Volume:bbl

Water Loss: 15.99 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 9000.00 ppm Filter Cake: inches

Recovery Information

Recovery Table

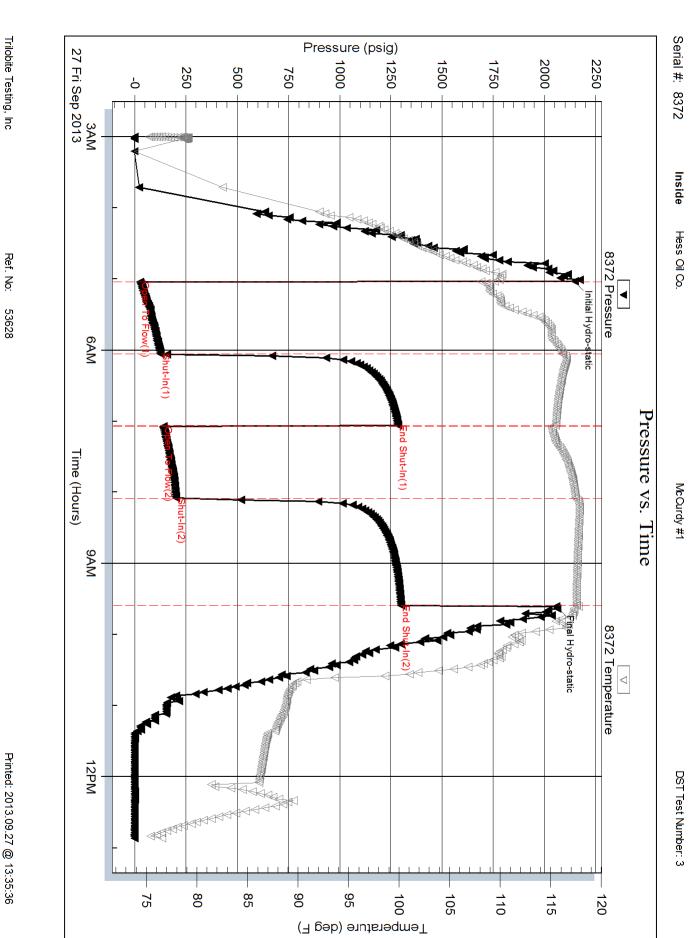
Length ft	Description	Volume bbl
60.00	OCWM o=5% w =30% m=65%	0.295
60.00	OCWM o=10% w =30% m=60%	0.295
120.00	OCM o=10% m=90%	0.590
200.00	GO g=10% o=90%	1.184

Total Length: 440.00 ft Total Volume: 2.364 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location: Recovery Comments: Resistivity- .38 @ 100deg = 12000

Trilobite Testing, Inc Ref. No: 53628 Printed: 2013.09.27 @ 13:35:36



ALLIED OIL & GAS SERVICES, LLC 061883 Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999

SERVICE POINT:

SOUTH	ILAKE, TE	EXAS 760	92			ToerA	Rend K
DATE9-19-13	SEC. TG	TWFつ	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH DO PM
McCUrby	WELL#	1	LOCATION BOOM	.11 00.		COLUMNIA	STATE
OLD OR NEW (Cir		<u> </u>	4 5	Vexx, 13	W to 22	New_	Ka
CONTRACTOR	Mall.	<u> </u>	1 8,33/				•
TYPE OF JOB	ing ox			OWNER -	Jame_		
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TOOL		DEF					
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BULK TRUCK			7		:	_ @ 	
<u>#I</u>	DRIVER			HANDLING	162.09	@ 2.48	401.98
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						TOTAL	
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ALLIED OIL & GAS SERVICES, LLC 061888 Federal Tax I.D. #20-8651475

REMIT TO P.O. BO SOUTH		EXAS 760	SERVICE POINT:				
						<u> </u>	Te-
DATE 9 28-13	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE MCCURDY	WELL#	1	LOCATION Brown	Well l'EW	4/25,	COUNTY N-2-A	STATE
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CASING SIZE 5	~		TH 4399 '	AMOUNT OR	DERED 150	h. Asc.	250 sel
TUBING SIZE DRILL PIPE			TH	10702°07	5 17 Kalsen	1 (030 M	unie-l_
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ALLIED OIL & GAS SERVICES, LLC 061889 Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOUTH		EXAS 76	092		•	SERV	VICE POINT:	nd K	
DATE 9 - 29-13	SEC.	TWP.	RANGE 22	C.	LLED OUT	ON LO	CATION	JOB START	JOB FINISH
MECOUGN	WELL#	1	LOCATION B		مرياد ٥٥	41/2 3	61,	COUNTY	STATE
OLD OR NEW (Ci			LOCATION 13	<u> </u>	BU 17 W	412.3	بدري	Nau	102
						1		J	
CONTRACTOR V	ella	<i>~</i> }			OWNER S	عست			
TYPE OF JOB			Tep Stone	_ف			-,		
HOLE SIZE 7 %			2. <i>44</i> 00	·	CEMENT			- (-O-	
CASING SIZE S	1/2		PTH		AMOUNT O	RDERED	400x	2 6940	8% Nel
TUBING SIZE DRILL PIPE	<u> </u>		PTH		4 #fx00	<u> </u>	<u> </u>		
TOOL DV 7	r_i _ \		<u>PTH</u> PTH \S74 ^						
PRES. MAX 19		<u>DE</u>	NIMUM Soc		COMMON				
MEAS. LINE			OE JOINT	<u>a</u>	COMMON_ POZMIX			^	- 1 ms n ne 22 ,
CEMENT LEFT IN	CSG.	Y.	ODJOHI		GEL				
PERFS.					CHLORIDE			-@	
DISPLACEMENT	37%	_			ASC				
		JIPMENT	7		400 5X	1,10	+w		6600.00
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	CEMENT HELPER							@	
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moth	<u>- Mor</u>		20	مكلم		:			
ZE GARINA	كتهذ		8 20 27 1 1/1,	- fless	DEPTH OF J	OB <u>15</u>	7 <u>4 '</u>		
Box Sock 10	بالمعالين		سبعهب	7	PUMP TRUC			2.249	<u> </u>
			andro bym	***	EXTRA FOO			_@	
1800"+ Clar			Begronger	HONG)	MILEAGE_	-		_@	
Charles Mrs	<u>Likacu</u>	was the same	0		MANIFOLD	1		_@	
			- Kon	لم		<u> </u>		_@	
		, b	_					_@	-
CHARGE TO:	את_(24							× V
STREET								TOTAL	3.249. 84
CITY									
CHI	\$)	ALE	ZIP			PLUG &	k FLOAT	r equipmen	т
									-
						.			
To: Alliad Oil &	Gas Sam.	iona TTC	,					_@	
To: Allied Oil &								_@	
You are hereby re						:			
and furnish ceme								_ =	-
contractor to do v								TOTAL	
done to satisfaction	on and su	pervision	or owner agen	IT.OF				IOIAL	
Anntonton Ti			and the limble			44.			
contractor. I have				14-	SALES TAX	(If Anv)			
TERMS AND CO				e side.	SALES TAX			., 72	
TERMS AND CO	ONDITIO	ONS" liste	d on the revers					8. 79	
TERMS AND CO	ONDITIO	ONS" liste	d on the revers					8, 7 <u>9</u> 2, <u>75</u> IEDAI	D IN 30 DAVE
TERMS AND CO	ONDITIO	ONS" liste	d on the revers					8, 79 2, 75 IF PAI	D IN 30 DAYS
	ONDITIO	ONS" liste	d on the revers		TOTAL CHA			8, 79 2, 15 11 IF PAI 3, 93	D IN 30 DAYS

JOB L	OG				SWIFT	l Serv	ices, Inc. Date 4 oct 13 page no.
CUSTOMER	Hess C	7:1	WELL NO.	1	LEASEMC	Curd.	JOB TYPE TO Abandon TICKET NO. 2568/
CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T C	PRESSUI TUBING	RE (PSI)	DESCRIPTION OF OPERATION AND MATERIALS
					TOBING	CASING	225 sk 60/40 poz (496gel)
							185k gel 29k hulls 28,52
							Parts 4328-38 DV tool - 1490'
	1400						on loc TRX 1/2)
							Dipe @ 4310'
 -	1430	<u>z</u>	54		Ø	<u> </u>	Dipe @ 4310' mix 18sk ge
		· <u>-</u> · · · · ·					
			-			<u> </u>	mix 35 51 60/40 poz (49/201)@ 13.1 pog 23k cotton seed hulls
	111-					<u> </u>	23k cotton speed hulls
·	1450		 				pull tubing to 1500'
			-				Pull tubing to 1500'
	1600	2-	46		//n =	<u> </u>	10 1 175 W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	STUV				100		mix 1754 Cof 40 (40/6 gel) @ 131 ppg - cement to surface -
					• • •		Central to surface.
	1635						pull toping out of hole
							pull tubing out of hole
	1720	1/2	6				m x 255k dou 85
						500	sht in 500psi
	1730		2				top of 52 55
							- count at suppre
					·····24		wash fevel
							pack up
	185		-	- -			- 10-
	<u>.00</u>						Job andite
							Thinks
							Flist, Blan, & Doug
							1 will to other, 1 poce
p							
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