Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1088625

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 # 5316
Name: Falcon Exploration, Inc.
Address 1: 125 N MARKET STE 1252
Address 2:
City: WICHITA State: KS Zip: 67202 + 1719
Contact Person: CYNDE WOLF
Phone: (316) 262-1378
CONTRACTOR: License # 5142
Name: Sterling Drilling Company
Wellsite Geologist: KEITH REAVIS
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 #:

04/09/2012	04/16/2012	04/17/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-069-20369-00-00
Spot Description:
SW NE SW SE Sec. 22 Twp. 28 S. R. 30 ☐ East ☑ West
977 Feet from ☐ North / ☑ South Line of Section
1857 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Gray
Lease Name: MICHAEL ESAU Well #: 1-22(SE)
Field Name: WC
Producing Formation: NA
Elevation: Ground: 2772 Kelly Bushing: 2785
Total Vertical Depth: 4325 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1883 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: 07/30/2012
☑ **Confidential Release Date:** 07/30/2014
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Deanna Garrison **Date:** 08/03/2012

[redacted] 1088625

Operator Name: Falcon Exploration, Inc. Lease Name: MICHAEL ESAU Well #: 1-22(SE)

Sec. 22 Twp. 28 S. R. 30 ☐ East ☑ West County: Gray

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
CHASE	2638	147
ROOT SHALE	3468	-683
STOTLER	3480	-695
TOPEKA	3751	-966
HEEBNER	4106	-1321
TORONTO	4126	-1341
LANSING	4216	-1431

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	12.25	8.625	24	1883	65/35;COMMON	825	GEL, CC
PRODUCTION	7.875	5.5	14	3623	AA-2	140	5% W60, SALT

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: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Falcon Exploration, Inc.
Well Name	MICHAEL ESAU 1-22(SE)
Doc ID	1088625

All Electric Logs Run

DIL
MEL
CDL
BHCS

DIAMOND TESTING

General Information Report

General Information

Company Name	FALCON EXPLORATION, INC.	**Representative**	TIM VENTERS
Contact	MIKE MITCHELL	**Well Operator**	FALCON EXPLORATION, INC.
Well Name	MICHAEL ESAU #1-22 (SE)	**Report Date**	2012/04/15
Unique Well ID	DST #1, STOTLER, 3453-3521	**Prepared By**	TIM VENTERS
Surface Location	SEC 22-28S-30W, GRAY CO. KS.		
Field	WILDCAT	**Qualified By**	KEITH REAVIS
Well Type	Vertical		
Test Type	CONVENTIONAL		
Formation	DST #1, STOTLER, 3453-3521		
Well Fluid Type	02 Gas		
Start Test Date	2012/04/14	**Start Test Time**	14:52:00
Final Test Date	2012/04/15	**Final Test Time**	00:20:00

Test Recovery:

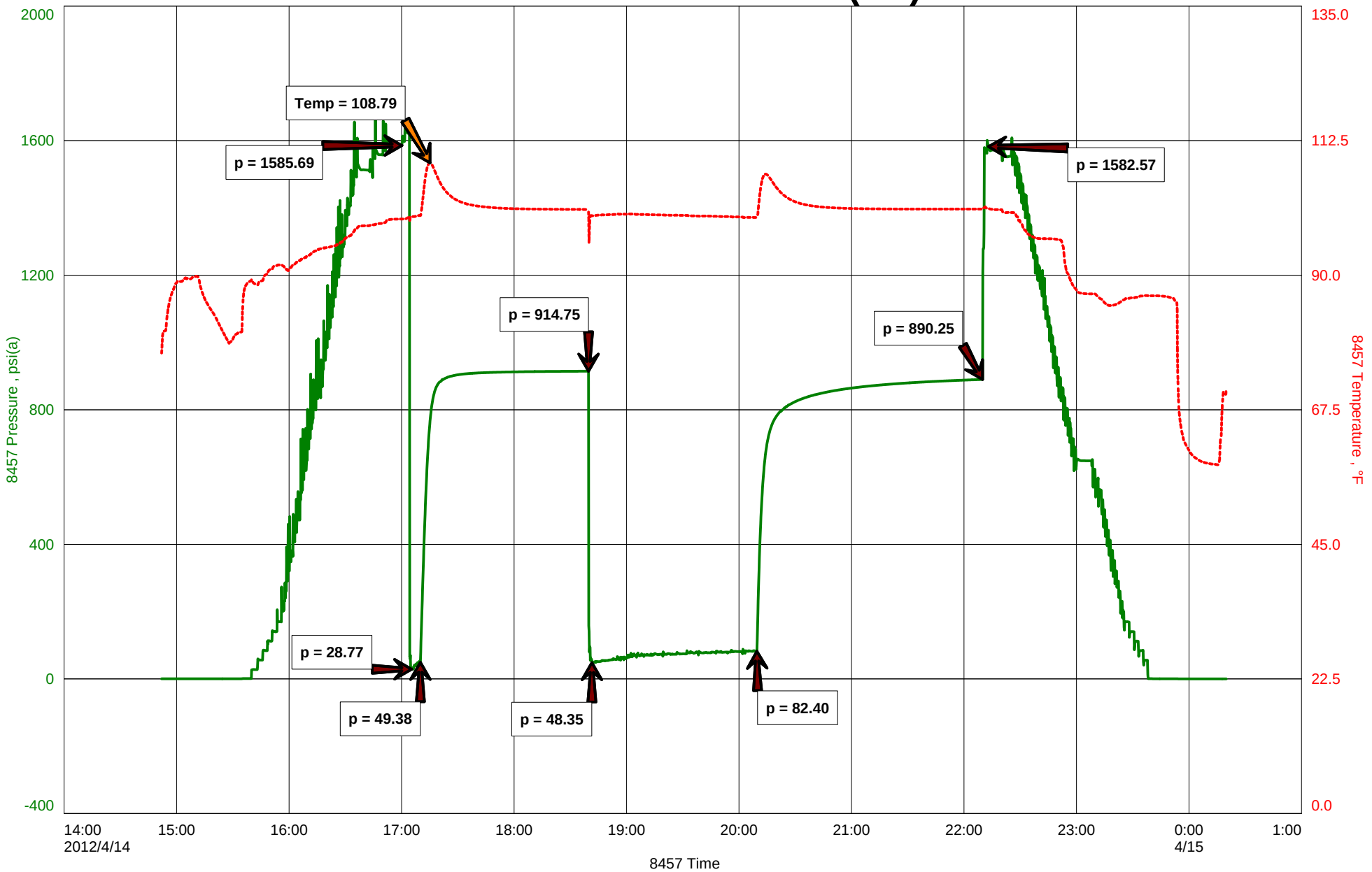
RECOVERED: 3310' GAS IN PIPE
210' MUD

TOOL SAMPLE: 4% OIL, 96% MUD

FALCON EXPLORATION, INC.
DST #1, STOTLER, 3453-3521
Start Test Date: 2012/04/14
Final Test Date: 2012/04/15

MICHAEL ESAU #1-22 (SE)
Formation: DST #1, STOTLER, 3453-3521
Pool: WILDCAT
Job Number: T041

MICHAEL ESAU #1-22 (SE)



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: MICHAELESAU122SEDST1

TIME ON: 14:52 4-14-12
TIME OFF: 00:20 4-15-12

Company FALCON EXPLORATION, INC. Lease & Well No. MICHAEL ESAU #1-22 (SE)

Contractor STERLING DRILLING CO. RIG #5 Charge to FALCON EXPLORATION, INC.

Elevation 2785 KB Formation STOTLER Effective Pay ____ Ft. Ticket No. T041

Date 4-14-12 Sec. 22 Twp. 28 S Range 30 W County GRAY State KANSAS

Test Approved By KEITH REAVIS Diamond Representative TIMOTHY T. VENTERS

Formation Test No. 1 Interval Tested from 3453 ft. to 3521 ft. Total Depth 3521 ft.

Packer Depth 3448 ft. Size 6 3/4 in. Packer depth ____ ft. Size 6 3/4 in.

Packer Depth 3453 ft. Size 6 3/4 in. Packer depth ____ ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 3434 ft. Recorder Number 8457 Cap. 10,000 P.S.I.

Bottom Recorder Depth (Outside) 3518 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEMICAL Viscosity 50 Drill Collar Length 331 ft. I.D. 2 1/4 in.

Weight 8.95 Water Loss 8.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2,100 P.P.M. Drill Pipe Length 3089 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 36 ft. Size 4 1/2-FH in

32' DP IN ANCHOR

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: GOOD 2 1/2 INCH BLOW, BUILDING, REACHING BOB 45 SEC. (NOBB)

2nd Open: VERY STRONG BLOW HITTING BOB INSTANTANEOUSLY. (NOBB)

Recovered 3310 ft. of GAS IN PIPE

Recovered 210 ft. of MUD

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Remarks:

TOOL SAMPLE: 4% OIL, 96% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 5:04 PM A.M. P.M. Time Started Off Bottom 10:09 PM A.M. P.M. Maximum Temperature 109 deg.

Initial Hydrostatic Pressure ..... (A) 1586 P.S.I.

Initial Flow Period ..... Minutes 5 (B) 29 P.S.I. to (C) 49 P.S.I.

Initial Closed In Period ..... Minutes 90 (D) 915 P.S.I.

Final Flow Period ..... Minutes 90 (E) 48 P.S.I. to (F) 82 P.S.I.

Final Closed In Period ..... Minutes 120 (G) 890 P.S.I.

Final Hydrostatic Pressure ..... (H) 1583 P.S.I.

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

Kansas
Corporation Commission

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

Mark Sievers, Chairman
Thomas E. Wright, Commissioner

Sam Brownback, Governor

July 25, 2012

CYNDE WOLF
Falcon Exploration, Inc.
125 N MARKET STE 1252
WICHITA, KS 67202-1719

Re: ACO1
API 15-069-20369-00-00
MICHAEL ESAU 1-22(SE)
SE/4 Sec.22-28S-30W
Gray 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,
CYNDE WOLF

OPERATOR

Company:	Falcon Exploration, Inc.		
Address:	125 N. Market Suite 1252 Wichita, KS 67202		
Contact Geologist:	Brian Fisher		
Contact Phone Nbr:	316-262-1378		
Well Name:	Michael Esau #1-22 (SE)		
Location:	Sec. 22 - T28S - R30W	API:	15-069-20369-0000
Pool:		Field:	Wildcat
State:	Kansas	Country:	USA

Scale 1:240 Imperial

Well Name:	Michael Esau #1-22 (SE)		
Surface Location:	Sec. 22 - T28S - R30W		
Bottom Location:			
API:	15-069-20369-0000		
License Number:	5316		
Spud Date:	4/9/2012	Time:	00:00
Region:	Gray County		
Drilling Completed:	4/16/2012	Time:	16:35
Surface Coordinates:	977' FSL & 1857' FEL		
Bottom Hole Coordinates:			
Ground Elevation:	2772.00ft		
K.B. Elevation:	2785.00ft		
Logged Interval:	2600.00ft	To:	4325.00ft
Total Depth:	4325.00ft		
Formation:	Stotler - Lansing		
Drilling Fluid Type:	Chemical/Fresh Water Gel		

SURFACE CO-ORDINATES

Well Type:	Vertical		
Longitude:		Latitude:	
N/S Co-ord:	977' FSL		
E/W Co-ord:	1857' FEL		

LOGGED BY

Keith Reavis
Consulting Geologist

Company:	Keith Reavis, Inc.		
Address:	3420 22nd Street Great Bend, KS 67530		
Phone Nbr:	620-617-4091		
Logged By:	KLG #136	Name:	Keith Reavis

CONTRACTOR

Contractor:	Sterling Drilling Company		
Rig #:	5		
Rig Type:	mud rotary		
Spud Date:	4/9/2012	Time:	00:00
TD Date:	4/16/2012	Time:	16:35
Rig Release:		Time:	

ELEVATIONS

K.B. Elevation:	2785.00ft	Ground Elevation:	2772.00ft
K.B. to Ground:	13.00ft		

NOTES

A Tooke Daq gas detection system owned by Sterling Drilling Company was employed on this well. ROP and gas data were imported into this geological report.

Due to positive results of DST #1 and electrical log analysis, it was determined that 5 1/2" production casing be set and the Stotler be further tested through perforations and stimulation.

Samples were saved and will be available for review at the Kansas Geological Survey Well Sample Library located in Wichita, KS.

Respectfully submitted,
Keith Reavis

Falcon Exploration, Inc.

DAILY DRILLING REPORT

DATE	7:00 AM DEPTH	REMARKS
4/12/2012		Geologist Keith Reavis on location @ 2005 hrs, 2491 ft. drilling ahead permian redbeds
4/13/2012	2808	drilling ahead, Chase Group, Fort Riley, Cottonwood, Neva
4/14/2012	3439	drilling ahead, Foraker, Stotler, gas kick and show warrant DST, short trip, TOH w/bit and in with tools, conducting DST #1
4/15/2012	3614	complete DST #1, successful test, back on bottom with bit, drilling ahead Tarkio, Bern, Topeka, Lecompton
4/16/2012	4165	drilling ahead, Lecompton, Heebner, Toronto, Douglas, Lansing, TD @ 4325 short trip, TOH, conduct logging operations
4/17/2012	4325	complete logging operations, geologist released and off location 0400 hrs

Falcon Exploration, Inc.

WELL COMPARISON SHEET

	DRILLING WELL Esau #1-22 977' FSL & 1857' FEL Sec. 22 T28S R30W 2785 KB				COMPARISON WELL Fry #1-23 850' FNL & 1850' FWL Sec. 23 T28S R30W 2801 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log
Chase	2639	146	2634	151	2633	168	-22	-17
Winfield	2710	75	2707	78	2707	94	-19	-16
Towanda	2760	25	2755	30	2754	47	-22	-17
Ft. Riley	2809	-24	2807	-22	2802	-1	-23	-21
Cottonwood	3079	-294	3075	-290	3063	-262	-32	-28
Neva	3135	-350	3130	-345	3122	-321	-29	-24
Foraker	3247	-462	3241	-456	3234	-433	-29	-23
Stotler	3483	-698	3480	-695	3466	-665	-33	-30
Topeka	3752	-967	3751	-966	3739	-938	-29	-28
Lecompton	3950	-1165	3947	-1162	3920	-1119	-46	-43
Heebner	4109	-1324	4106	-1321	4086	-1285	-39	-36
Lansing	4215	-1430	4216	-1431	4185	-1384	-46	-47
Stark	np				4538	-1737		
Marmaton	np				4691	-1890		
Pawnee	np				4778	-1977		
Cherokee	np				4823	-2022		
Morrow	np				5018	-2217		
Miss St. Gen.	np				5074	-2273		
St. Louis A por	np				5196	-2395		
Warsaw	np				5542	-2741		
Osage	np				5830	-3029		
Viola	np				6074	-3273		
Total Depth	4325	-1540	4324	-1539	6151	-3350	1810	1811

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: MICHAELESAU122SEDST1

TIME ON: 14:52 4-14-12
TIME OFF: 00:20 4-15-12

Company FALCON EXPLORATION, INC. Lease & Well No. MICHAEL ESAU #1-22 (SE)
Contractor STERLING DRILLING CO. RIG #5 Charge to FALCON EXPLORATION, INC.
Elevation 2785 KB Formation STOTLER Effective Pay Ft. Ticket No. T041
Date 4-14-12 Sec. 22 Twp. 28 S Range 30 W County GRAY State KANSAS
Test Approved By KEITH REAVIS Diamond Representative TIMOTHY T. VENTERS

Formation Test No. 1 Interval Tested from 3453 ft. to 3521 ft. Total Depth 3521 ft.
Packer Depth 3448 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.
Packer Depth 3453 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 3434 ft. Recorder Number 8457 Cap. 10,000 P.S.I.
Bottom Recorder Depth (Outside) 3518 ft. Recorder Number 11029 Cap. 5,025 P.S.I.
Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type CHEMICAL Viscosity 50 Drill Collar Length 331 ft. I.D. 2 1/4 in.
Weight 8.95 Water Loss 8.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in
Chlorides 2,100 P.P.M. Drill Pipe Length 3089 ft. I.D. 3 1/2 in
Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in
Did Well Flow? NO Reversed Out NO Anchor Length 36 ft. Size 4 1/2-FH in
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 32' DP IN ANCHOR Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: GOOD 2 1/2 INCH BLOW, BUILDING, REACHING BOB 45 SEC. (NOBB)
2nd Open: VERY STRONG BLOW HITTING BOB INSTANTANEOUSLY. (NOBB)

Recovered 3310 ft. of GAS IN PIPE
Recovered 210 ft. of MUD
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Price Job
Other Charges

Remarks:

Insurance

TOOL SAMPLE: 4% OIL, 96% MUD

Total

Time Set Packer(s) 5:04 PM A.M. P.M. Time Started Off Bottom 10:09 PM A.M. P.M. Maximum Temperature 109 deg.

Initial Hydrostatic Pressure ..... (A) 1586 P.S.I.

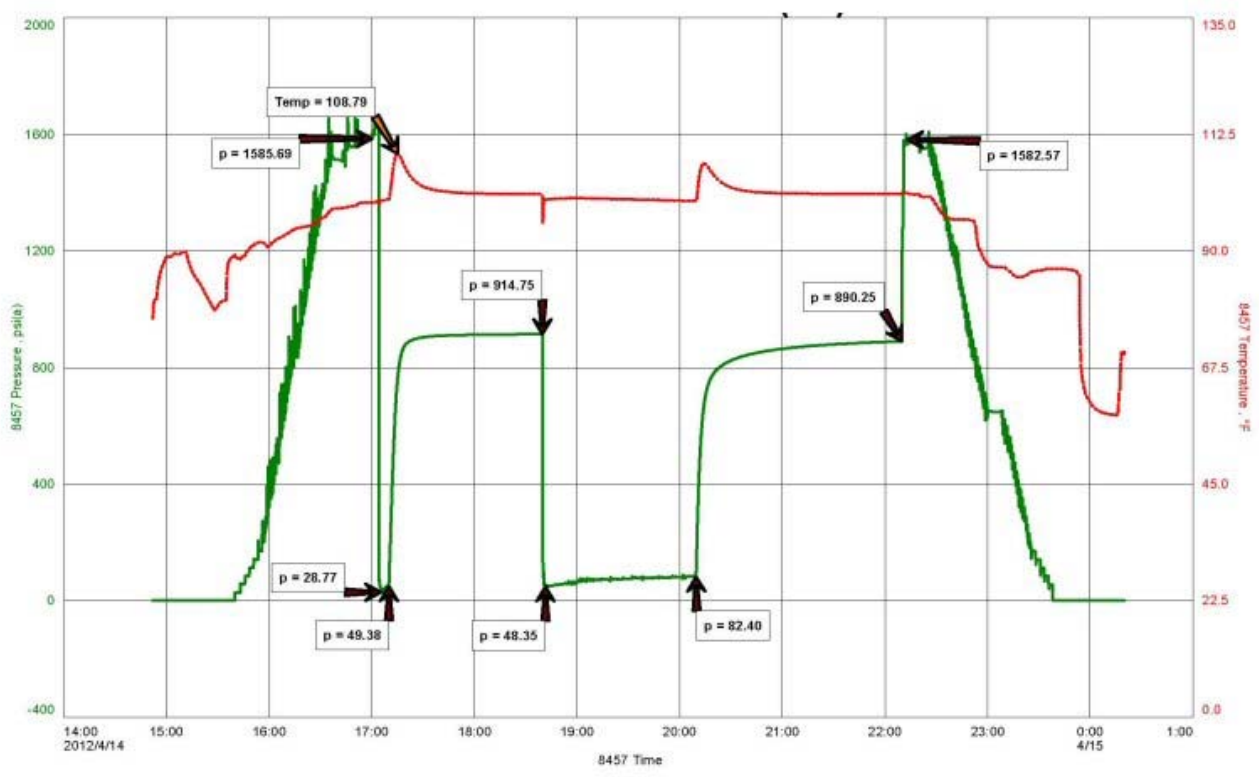
Initial Flow Period ..... Minutes 5 (B) 29 P.S.I. to (C) 49 P.S.I.

Initial Closed In Period ..... Minutes 90 (D) 915 P.S.I.

Final Flow Period ..... Minutes 90 (E) 48 P.S.I. to (F) 82 P.S.I.

Final Closed In Period ..... Minutes 120 (G) 890 P.S.I.

Final Hydrostatic Pressure ..... (H) 1583 P.S.I.



INITIAL FLOW

Time O'Clock	Orifice Size	Gauge	CF/D
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	

FINAL FLOW PSI

Time O'Clock	Orifice Size	Gauge	CF/D
10	1/2 in.	5.5 in.	81,800
20	1/2 in.	8 in.	101,000
30	1/2 in.	9.5 in.	112,000
40	1/2 in.	10.5 in.	118,500
*50	1/2 in.	11.5 in.	125,000
60	1/2 in.	12 in.	129,000
70	1/2 in.	12.5 in.	131,500
80	1/2 in.	13 in.	134,000
90	1/2 in.	13 in.	134,000
	in.	in.	

* TOOK SAMPLE

ROCK TYPES

Anhy vert, Dolsec, Lmst fw7>, shale, gry, shale, red
Dolprim, Lmst fw<7, shale, grn, Carbon Sh

ACCESSORIES

MINERAL
- Argillaceous
- Chert, dark
- Dolomitic
- Glauconite
- Mineral Crystals
- Pyrite
- Chert White

FOSSIL
- Bioclastic or Fragmental
- F Fossils < 20%
- Oolite
- Pellets
- Oomoldic

STRINGER
- Shale
- green shale
- red shale
- carb shale

TEXTURE
- C Chalky
- L Lithogr

OTHER SYMBOLS

MISC
- Daily Report
- Digital Photo
- Document
- Folder
- Link
- Vertical Log File
- Horizontal Log File
- Core Log File
- Drill Cuttings Rpt

DST
- DST Int
- DST alt
- Core
- tail pipe

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16

0 Total Gas (units) 100
C1 (units) 100
C2 (units) 100
C3 (units) 100
C4 (units) 100

2800 2820 2840 2860 2880 2900 2920 2940 2960 2980 3000 3020 3040 3060 3080 3100 3120 3140 3160 3180 3200 3220 3240 3260 3280 3300 3320 3340 3360 3380

as above, some mottled fossiliferous dolomite

Fort Riley 2809 -24

very fine samples - dolomite, gray, microcrystalline, mottled, fossiliferous, soft to dense, no visible porosity, no shows or fluoresence

limestone, white to cream, slightly chalky and fossiliferous, with dolomitic limestone, gray, microcrystalline, mottled fossiliferous, no visible porosity or shows, no fluoresence, with: chert, gray fossiliferous, and dolomite as above, poor fine samples

flood red and gray shale

poor samples, mostly shale, with limestone, white to light gray, some mottled, fossiliferous, some small pieces gray mottled fossiliferous chert, some dolomites as above

limestone as above, some bioclastic, no shows

Mud-Co Mud Ck
@ 2985'
1300 hrs 4/13/12
vis 30 wt 9.6
pv 2 yp 3
wl nc cake na
pH 7.0
chl 37300
cal hvy
sol 7.1
lcm 0#
dmc $5423.05
cmc $9478.85

shale and limestone, poor samples, limestone is white to gray, fossiliferous to bioclastic, poor visible porosity, some scattered white fluoresence, no visible shows

as above

poor samples, as above, some white crystalline dolomite

poor samples, abundant shales, some white chalky and light gray limestones, small specimens, no shows

Cottonwood 3079 -294

limestone, white to light gray, mottled bioclastic to oolitic and some pelletal, some pinpoint porosity, small specimens, no visible mold development, no shows, even faint green mineral fluoresence

poor samples, very shaley, some mixed white to gray fossiliferous limestones, no shows, faint fluoresence

Neva 3135 -350

poor samples, abundant shales, with: limestones, mixed white to gray, microcrystalline, fossiliferous, small specimens, poor visible porosity, no shows, some faint fluoresence

Red Eagle

limestone, white, cryptocrystalline, chalky, some bioclastic/fossiliferous, trace interclast porosity, fair white fluoresence, no show gas

displace mud system @ 3200'

poor samples, abundant shales, mixed fine limestones

samples improve, limestone, cream to gray, fossiliferous to oolitic, abundant chalk in samples, no shows

Foraker 3247 -462

limestone, cream, bioclastic to oolitic, poor visible porosity, chalky, no shows, abundant chalk in samples, some pale green fluoresence

limestone, cream to gray, microcrystalline, fossiliferous to oolitic, dense to chalky, abundant chalk, no shows, some pale green fluoresence

limestone as above, increased oolitic, moderate chalk, no shows

limestone, gray, microcrystalline, dense, fossilifeorus, with chert, gray fossiliferous and gray limey shales

limestone, mixed gray fossiliferous, some mottled, very weathered, with limestone, cream, chalky fossiliferous, scattered gray mottled fossiliferous cherts, some chalk, no shows

as above, grading to mostly darker gray limestones, some gray microcrystalline lithographic, abundant gray shales

as above

limestone, cream to gray, bioclastic, very small poor samples, poor visible porosity, no shows, some scattered cream cryptocrystalline lithographic, dense, with bright white fluoresence

limestone, mixed cream to gray, fossiliferous to bioclastic, some pelletal, small samples, with abundant limestone, gray, cryptocrystalline to microcrystalline lithographic, abundant gray shales, poor overall visible porosity, some cherts, no shows

limestone, cream, very fossiliferous to bioclastic, chalky in part, poor visible porosity, no shows

red, gray and green shales

DST #1 3453-3521 - 5-90-90-120 - recovered 210 ft mud - GTS 1 1/2 min into 2nd flow, GA 81,000 cfd to 134,000 cfd in 90 min, FP's 29-49# & 48-82#, SIP's 915-890#, HSH 1586-183#, BHT 109 deg. F

Stotler 3483 -698

limestone, cream to light gray, mixed fossiliferous, some scattered oolitic, mostly dense with poor visible porosity, no shows, some scattered very faint fluoresence, no shows

MICHAELESAU122SEDST1all.pdf

limestone, cream, chalky bioclastic, some pin-point porosity, fairly dense, slow bleeding gas bubbles on break, no odor, fair greenish-white fluoresence

deviation survey 1.5 deg.

lots of trip trash in samples, limestones, mixed cream to gray and brown, fossiliferous, with abundant shales, some pyrite

Tarkio

limestone, cream to light gray, microcrystalline, fossiliferous, chalky but dense, glauconitic in part, poor visible porosity, faint even bluish-white fluoresence, no shows

limestone, light gray, grainy bioclastic to fossiliferous, chalky, some interclast pinpoint porosity, abundant chalk, no shows

limestone, brown mottled fossilifeorus, some gray/green argillaceous, with gray pelletal, no shows

limestone, light gray, cryptocrystalline, dense lithographic, with light gray cryptocrystalline fossiliferous, moderate chalk in samples

Bern

limestone, light gray, oolitic and fossiliferous, poor visible porosity, glauconitic in part, no shows

grading to limestone, mixed dark gray grainy fossiliferous, brown mottled fossiliferous, cream microcrystalline lithographic to fossiliferous

as above, influx limey gray shales

limestone, light gray, microcrystalline, fossiliferous, dense, some secondary calcite and large clast, cherty in part, moderate chalk in samples, no shows

limestones as above, some darker gray fossiliferous limestones, still carrying moderate chalk

Topeka 3752 -967

limestone, cream to gray and tan, chalky fossiliferous to bioclastic, some light gray fossiliferous cherts, abundant chalk, no shows or fluoresence

as above

limestone as above, decrease in chalk and chert

limestone, cream to light gray, fine oolitic to grainy bioclastic, poor visible porosity, with: limestone, gray to tan, microcrystalline, dense fossiliferous, abundant chalk, no shows

limestone, cream to light gray, oomoldic, some fair oomold porosity, even pale green fluoresence, no shows, abundant chalk

limestone, cream to light gray, mixed chalky fossilifeorus to cryptocrystalline chalky lithographic, still abundant chalk, no shows

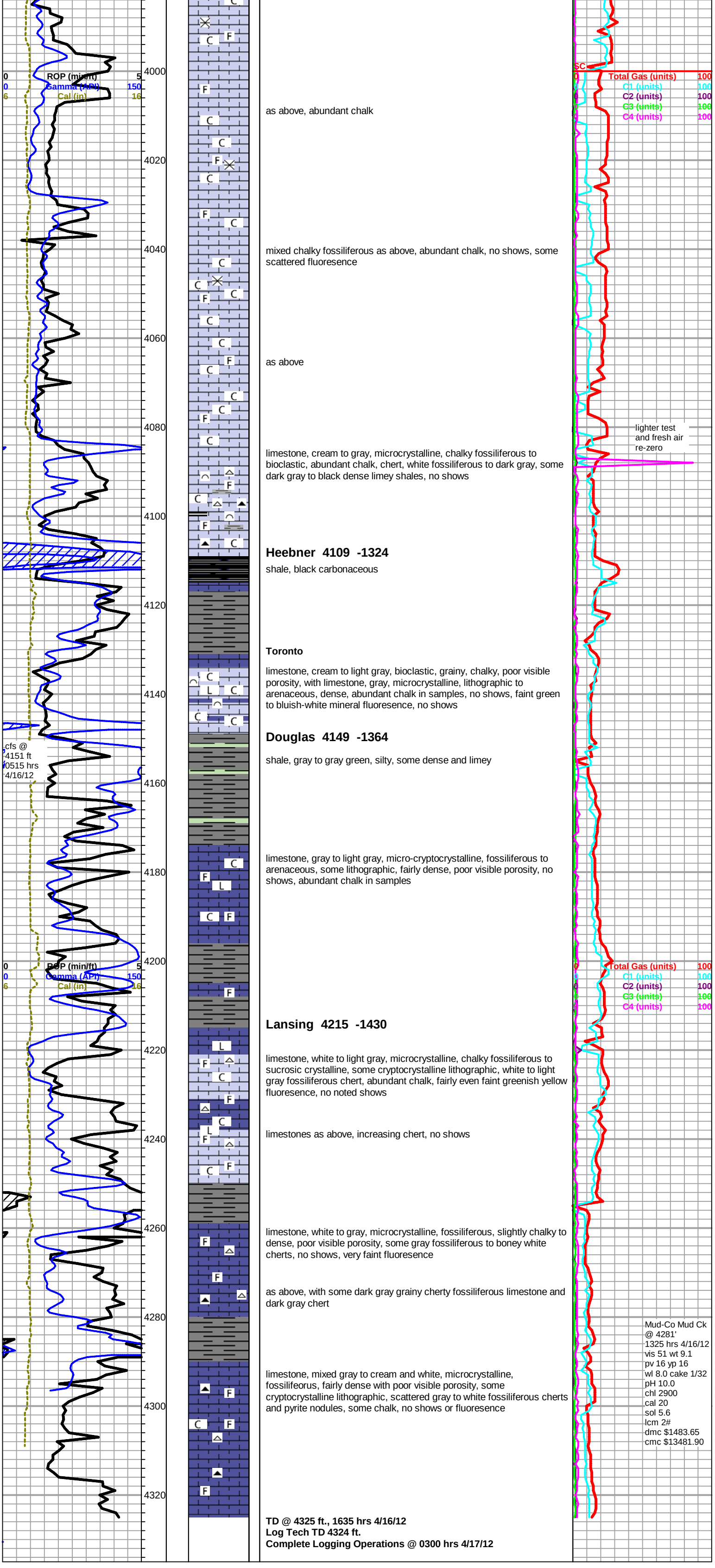
limestone, cream to gray, mixed fossiliferous to cryptocrystalline lithographic, some sub-sucrosic, moderate chalk, poor visible porosity, no shows, some faint fluoresence - some scattered white fossiliferous cherts

shale, gray to brown, silty to fossiliferous

Lecompton 3950 -1165

limestone, light gray, microcrystalline, fossiliferous to arenaceous, some weathered, with limestone, blue-gray, cryptocrystalline, slightly fossiliferous to lithographic, dense, no shows

limestone, cream to white and blue-gray, microcrystalline, fossiliferous, some large secondary calcite crystals, some scattered intercrystalline and interclast porosity, no shows, some pale green mineral fluoresence, flood chalk



as above, abundant chalk

mixed chalky fossiliferous as above, abundant chalk, no shows, some scattered fluoresence

as above

limestone, cream to gray, microcrystalline, chalky fossiliferous to bioclastic, abundant chalk, chert, white fossiliferous to dark gray, some dark gray to black dense limey shales, no shows

Heebner 4109 -1324

shale, black carbonaceous

Toronto

limestone, cream to light gray, bioclastic, grainy, chalky, poor visible porosity, with limestone, gray, microcrystalline, lithographic to arenaceous, dense, abundant chalk in samples, no shows, faint green to bluish-white mineral fluoresence, no shows

Douglas 4149 -1364

shale, gray to gray green, silty, some dense and limey

limestone, gray to light gray, micro-cryptocrystalline, fossiliferous to arenaceous, some lithographic, fairly dense, poor visible porosity, no shows, abundant chalk in samples

Lansing 4215 -1430

limestone, white to light gray, microcrystalline, chalky fossiliferous to sucrosic crystalline, some cryptocrystalline lithographic, white to light gray fossiliferous chert, abundant chalk, fairly even faint greenish yellow fluoresence, no noted shows

limestones as above, increasing chert, no shows

limestone, white to gray, microcrystalline, fossiliferous, slightly chalky to dense, poor visible porosity, some gray fossiliferous to boney white cherts, no shows, very faint fluoresence

as above, with some dark gray grainy cherty fossiliferous limestone and dark gray chert

limestone, mixed gray to cream and white, microcrystalline, fossilifeorus, fairly dense with poor visible porosity, some cryptocrystalline lithographic, scattered gray to white fossiliferous cherts and pyrite nodules, some chalk, no shows or fluoresence

TD @ 4325 ft., 1635 hrs 4/16/12
Log Tech TD 4324 ft.
Complete Logging Operations @ 0300 hrs 4/17/12

Mud-Co Mud Ck
@ 4281'
1325 hrs 4/16/12
vis 51 wt 9.1
pv 16 yp 16
wl 8.0 cake 1/32
pH 10.0
chl 2900
cal 20
sol 5.6
lcm 2#
dmc $1483.65
cmc $13481.90

ALLIED CEMENTING CO., INC.

Federal Tax I.D.# 48-0727860

27029

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: LIBERAL KS

DATE 4-11-12	SEC. 22	TWP. 28S	RANGE 30W	CALLED OUT	ON LOCATION	JOB START 12:30 AM	JOB FINISH 1:30 PM
LEASE MICHEAL ESAU	WELL # 1-22	LOCATION Copland N. #4 TOCC KS N				COUNTY Gray	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR SIT
TYPE OF JOB 8 5/8 SURFACE
HOLE SIZE 12¼ T.D. 1889'
CASING SIZE 8 5/8 24# DEPTH 1883'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX 1000 MINIMUM 0
MEAS. LINE SHOE JOINT 40
CEMENT LEFT IN CSG. 40
PERFS.
DISPLACEMENT 111.2 BBL

OWNER SAME

EQUIPMENT

PUMP TRUCK CEMENTER JOSH
549/550 HELPER BETO / KENNY
BULK TRUCK
DRIVER VINCENTE
BULK TRUCK
457/251 DRIVER ANGEL

REMARKS:

THANK YOU

CIRC CMT TO SURFACE

CHARGE TO: FALCON EXP
STREET
CITY STATE ZIP

To Allied Cementing Co., Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE Leon Kuhn

CEMENT

AMOUNT ORDERED 675 SK 65/35 6% GEL 3% CC ¼# ROSEAL
150 A 2% GEL 3% CC

COMMON	150 A	@ 16.25	2437.50
POZMIX		@	
GEL	3 SK	@ 21.25	63.75
CHLORIDE	4 SK CC	@ 58.20	232.80
ASC		@	
	675 LITE	@ 15.00	10,125.00
		@	
		@	
	FLOSEAL 169 LB	@ 2.20	456.30
		@	
		@	
		@	
		@	
HANDLING	863	@ 2.25	1941.75
MILEAGE	5K x mi x 111		4776.50
		TOTAL	21401.75

SERVICE

DEPTH OF JOB		1883'	
PUMP TRUCK CHARGE			1925.00
EXTRA FOOTAGE		@	
MILEAGE	100 mi	@ 7.00	700.00
MANIFOLD + HEAD		@	200.00
LT UEL mi	100 mi	@ 4.00	400.00
		@	
		TOTAL	3225.00

PLUG & FLOAT EQUIPMENT

8 5/8

3- BASKET		@ 314.00	942.00
3- CENTRALIZER		@ 67.00	201.00
1- AFU		@	235.00
1- GUIDE SHOE		@	404.00
1- SW PLG		@	101.00
		TOTAL	1883.00

TAX
TOTAL CHARGE $ 26312.75
DISCOUNT $ 19884.56 IF PAID IN 30 DAYS

Leon Kuhn
PRINTED NAME

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer Falcon Exploration	Lease No.	Date 4/17/12
Lease Michael Esau	Well # 1-22	Service Receipt
Casing 5 1/2 / Depth 3623	County Gray	State KS
Job Type L.S. / Formation	Legal Description 22-28-30	

Pipe Data		Perforating Data		Cement Data
Casing size 5 1/2	Tubing Size	Shots/Ft		Lead 140sx 14.8# AA-2
Depth 3623'	Depth	From	To	1.54 6.64
Volume 87	Volume	From	To	
Max Press 1500	Max Press	From	To	Tail in
Well Connection P.C.	Annulus Vol.	From	To	
Plug Depth	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
12.00					on loc. spot trucks, R.U. safety mtg
16.22	2500				P.S. test
16.25	250		5	5	H2O
16.27	250		12	5	Superflush
16.30	250		5	5	H2O
16.44					Plug R+M
16.59	240		0	5	Start mixing @ 14.8#
17.09	0		38	—	Finish mixing, Drop Plug
17.12					Wash up P+L
17.20	210		0	7.3	Start Disp
17.30	600		77	2.5	Slow Rate
17.35	1500		87	—	Plug Down
					Release Psi, Plug held
					Job Complete

Service Units	19888	39723 39926	35750 39925			
Driver Names	Hinz	R. Olds	Vasquez			

Customer Representative: Lucas Kuhn
Station Manager: Jerry Bennett
Cementer: Chad Hinz

Taylor Printing, Inc.