

Scale 1:240 Imperial

Well Name: # 1-15 K. Clark
Surface Location: 1700' FNL, 850' FWL Sec. 15-19S-29W
Bottom Location:
API: 15-101-22404-00-00
License Number:
Spud Date: 10/17/2012 Time: 9:00 PM
Region: Lane County
Drilling Completed: 10/25/2012 Time: 7:11 AM
Surface Coordinates: 639030 & 1421869
Bottom Hole Coordinates:
Ground Elevation: 11.00ft
K.B. Elevation: 2838.00ft
Logged Interval: 3500.00ft To: 4740.00ft
Total Depth: 4740.00ft
Formation: Mississippian
Drilling Fluid Type: Chemical/Fresh Water Gel

OPERATOR

Company: Forestar Petroleum Corp
Address: 1801 Broadway, suite 900
Denver, CO 80202

Contact Geologist: Ben Jackson
Contact Phone Nbr: 303-931-7368 / 303-297-2200
Well Name: # 1-15 K. Clark
Location: 1700' FNL, 850' FWL Sec. 15-19S-29W API: 15-101-22404-00-00
Pool: Field: Cleve
State: Kansas Country: USA

LOGGED BY



Charlie Sturdavant Consulting

Company: Charlie Sturdavant Consulting
Address: 920 12th Street
Golden, CO 80401

Phone Nbr: 303-907-2295----303-384-9481
Logged By: Geologist Name: Charlie Sturdavant

NOTES

The Forestar Petroleum Corp. # 1-15 K. Clark well was drilled to an LTD of 4740 feet, bottoming in the Mississippian. Four drill stem tests were conducted during the drilling of this well. All zones that encountered sample shows of oil were tested with discouraging results. Based on the negative DST results, sample examination, and log analysis, it was determined by all parties involved that the well should be plugged and abandoned.

The dry samples were saved and will be available for review at the Kansas Geological Survey well sample library, located in Wichita, Kansas.

Respectfully submitted
Charlie Sturdavant
Consulting Geologist

Well Comparison Sheet

Charlie Sturdavant Consulting

WELL COMPARISON SHEET

DRILLING WELL					COMPARISON WELL				COMPARISON WELL			
Forestar Petroleum Corp # 1-15 K. Clark 1700' FNL & 850' FWL Sec. 15 T19S R29W					Dunne Oil # 1-15 Clark SW-SE-NW Sec. 15 T19S R29W				Larson Operating Co # 1-15 Clark N/2-N/2-SW Sec. 15 T19S R29W			
2838 KB					2832 KB		Structural Relationship		2833 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Anhydrite	2178	660	2171	667	2161	671	11	4	2164	669	9	2
Topeka	3707	-869	3707	-869		2832			3710	-877	-8	-8
Heebner	3956	-1118	3956	-1118	3944	-1112	6	6	3960	-1127	-9	-9
Toronto	3970	-1132	3969	-1131	3958	-1126	6	5	3974	-1141	-9	-10
Lansing	3998	-1160	3997	-1159	3986	-1154	6	5	4002	-1169	-9	-10
Muncie Creek	4178	-1340	4181	-1343	4170	-1338	2	5	4189	-1356	-16	-13
Stark Shale	4288	-1450	4289	-1451	4274	-1442	8	9	4300	-1467	-17	-16
Base KC	4370	-1532	4370	-1532	4355	-1523	9	9	4380	-1547	-15	-15
Marmaton	4405	-1567	4408	-1570	4390	-1558	9	12	4416	-1583	-16	-13
Pawnee	4485	-1647	4484	-1646	4469	-1637	10	9	4496	-1663	-16	-17
Fl. Scott	4507	-1669	4506	-1668	4492	-1660	9	8	4518	-1685	-16	-17
Upper Cherokee	4524	-1686	4524	-1686	4508	-1676	10	10	4536	-1703	-17	-17
L. Cherokee	4558	-1720	4557	-1719	4541	-1709	11	10	4569	-1736	-16	-17
Johnson	4598	-1760	4594	-1756	4579	-1747	13	9	4608	-1775	-15	-19
Mississippian	4626	-1788	4625	-1787	4608	-1776	12	11	4642	-1809	-21	-22
Total Depth	4740	-1902	4770	-1932	4625	-1793	109	139	4649	-1816	86	116

Daily Drilling Report

Charlie Sturdavant Consulting

DAILY DRILLING REPORT

Company: Charlie Sturdavant Consulting
920 12th Street
Golden, CO 80401

Well: K Clark # 1-15
Location: 1700' FNL & 850' FWL
Sec. 15 T19S R29W
Lane County, KS

Forestar Petroleum Office: 303-297-2200
Ben Jackson Cell: 303-931-7368

Wellsite Geologist: Charlie Sturdavant
Cell: (303) 907-2295
Office: (303) 384-9481

Elevation: 2838' KB 2827' GL
Field: Wildcat
API No.: 15-101-22404-0000
Surface Casing: 8 5/8" set @ 268' KB

Drilling Contractor: Murfin Drilling Rig #22 620-629-0660 Tool Pusher: Kelly Wilson cell: 785-443-1630/785-769-6103

DATE	7:00 AM DEPTH	REMARKS
10/17/2012	0 ft.	Move in. Spud @ 2100 hrs.
10/18/2012	270 ft.	WOC. Set 6 joints of 8-5/8" surface csg @ 268'. Plug down @ 0230 hrs.
10/19/2012	1780 ft.	Drilling ahead with a PDC bit.
10/20/2012	3584 ft.	Drilling ahead.
10/21/2012	4180 ft.	Drilling ahead.
10/22/2012	4370 ft.	Tripping out of hole for DST # 1: 4182-4370'. Rec: 234' OCMW (5% oil, 20% mud, 75% water), 680' OCGMW (5% oil, 5% gas, 40% mud, 50% water), 186' WCM (5% mud, 95% mud), SIP: 889-888#.
10/23/2012	4380 ft.	Conducting DST # 2: 4368-4480'. Rec: 544' MCW (20% mud, 80% water), 586' WCM w/ oil scum (30% water, 70% mud), SIP: 825-806#.
10/24/2012	4620 ft.	Conducting DST # 3, 4478-4620', Rec: 120 mud, SIP: 1104-1070#.

10/25/2012

4718 ft. Drilling ahead. Completed DST # 4 last night, 4651-4664', Rec: 5' mud, SIP: 30-27#. RTD 4740 ft. reached @ 0810 hrs. Pioneer Wireline Services completed logging operations @ 1600 hrs. Geologist off location off location @ 1615 hrs.

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: Latitude:
N/S Co-ord: 639030
E/W Co-ord: 1421869

CONTRACTOR

Contractor: Murfin Drilling Co.
Rig #: 22
Rig Type: mud rotary
Spud Date: 10/17/2012 Time: 9:00 PM
TD Date: 10/25/2012 Time: 7:11 AM
Rig Release: Time:

ELEVATIONS

K.B. Elevation: 2838.00ft Ground Elevation: 11.00ft
K.B. to Ground: 2827.00ft

ROCK TYPES

Congl Dolsec Lmst fw>7 shale, gry shale, red
 Dolprim Lmst fw<7 shale, grn Carbon Sh

ACCESSORIES

MINERAL

— Argillaceous
⊥ Calcareous
△ Chert White
⌋ Dolomitic
∩ Glauconite
Mc Mica
P Pyrite
• Sandy

FOSSIL

∩ Bioclastic or Fragmental
◇ Brachiopod
○ Crinoids
F Fossils < 20%
⊕ Fossiliferous
⊕ Gastropod
⊕ Oolite
○ Oolites
⊕ Oomoldic
• Pelloids
♂ Pellets
△ Spicules

STRAT./SED. STRUCTS

Stylolite
 Stylolites

STRINGER

Siltstone
 Shale
 green shale
 red shale

TEXTURE

C Chalky
e Earthy
L Lithogr

OTHER SYMBOLS

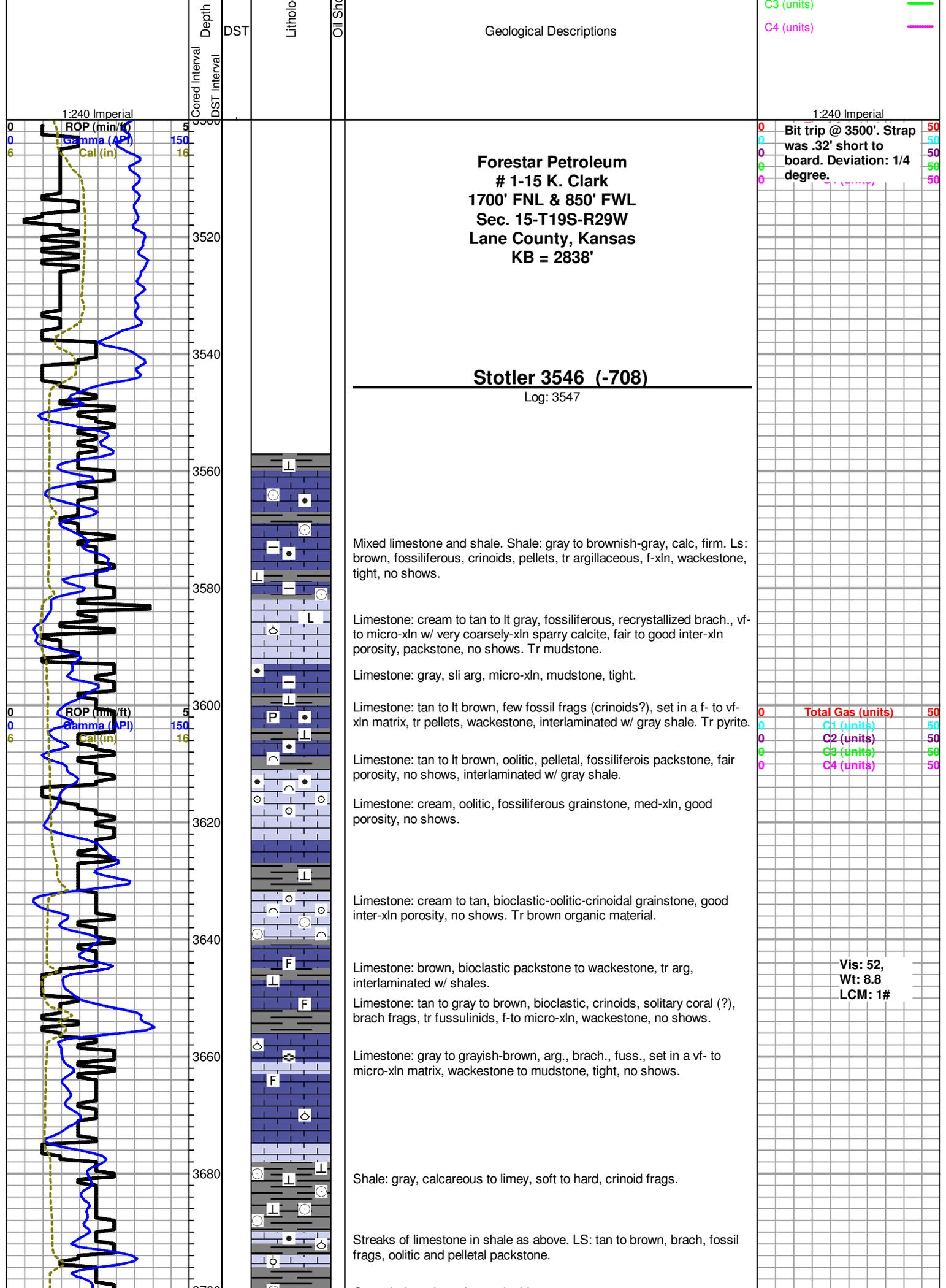
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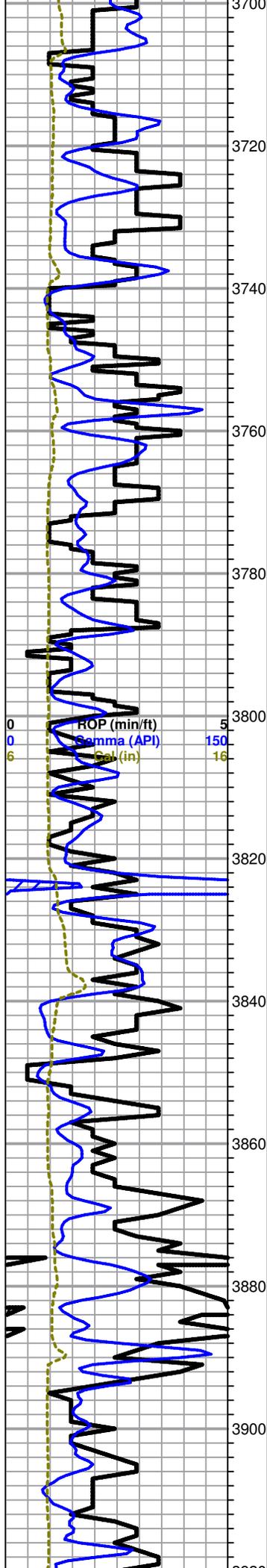
Daily Report
 Digital Photo
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 Horizontal Log File
 Core Log File
 Drill Cuttings Rpt

DST

DST Int
 DST alt

Curve Track #1	Intervals	gy	DW	TG, C1 - C5
ROP (min/ft)				Total Gas (units)
Gamma (API)				C1 (units)
Cal (in)				C2 (units)





Topeka 3707 (-869)

Gray shale: calc, soft., tr crinoids.

Limestone: tan to gray to brown, oolitic to pelletal to fossiliferous, grainstone to packstone, no shows.

Limestone: gray to brown, vf- to micro-xln matrix, fewer fossils and oolites, wackestone, tight, no shows.

Limestone: cream to tan, micro-xln mudstone, tight, no shows.

Limestone: cream to tan, granular, succrosic, med- to f-xln, good inter-xln porosity, reddish-brown organic specks, possible exposure surface.

Limestone: tan, bioclastic, w/ oolites, f-xln matrix, fair inter-xln porosity, grainstone to packstone, no shows.

Tr black carbonaceous shale.

Limestone: lt brown to brown, vf- to micro-xln matrix, very few fossil frags, tight, mudstone, no shows.

Limestone: tan to grayish-brown, bioclastic, oolites, pellets, fussioninids, set in a vf-xln matrix, argillaceous, packstone, fair inter-xln porosity, no shows.

Limestone: tan, similar to above w/ fewer fossil frags and oolites, set in a vf- to micro-xln matrix, wackestone, tighter, no shows

Limestone: lt tan to lt gray, fussioninid packstone, f- to med-xln, tr sparry calcite, good inter-xln porosity, no shows.

Limestone: tan to lt brown, sli arg., random oolites and pellets, fossil frags, f-xln, packstone and wackestone, inter-layered w/ gray to greenish-gray, soft, calc shale. No shows.

Mud-Co, Mud check
3787' @ 1535 hrs.
10/20/2012
Vis. 50, Wt. 8.9 PV
13, YP 12
WL 8.8, Cake 1/32"
pH 9.5, Ca 20 ppm
CHL 2,700 ppm
Sol 4.2, LCM 3
DMC: \$3,709.70
CMC: \$9,649.55

0	Total Gas (units)	50
0	C1 (units)	50
0	C2 (units)	50
0	C3 (units)	50
0	C4 (units)	50

King Hill Shale 3824 (-986)

Shale: black, carbonaceous, soft, dolomitic.

Limestone: tan to lt brown, micro-xln, mudstone, sli arg.

Shale: gray, calc, soft.

Limestone: lt tan, crypto-xln micrite, tight, no shows.

Limestone: lt tan, bioclastic w/ random oolites set in vf-xln matrix, packstone, tr sparry calcite indicating diagenetic altn, good secondary porosity, no shows.

Limestone: cream to tan, tr fossil frags set in micro-xln matrix, mudstone, tight, no shows. Tr chert: lt tan, spicular, vitreous.

Limestone: lt tan to tan, f-xln, tr foss., chalky, granular texture, wackestone, tr arg., fair porosity, no shows.

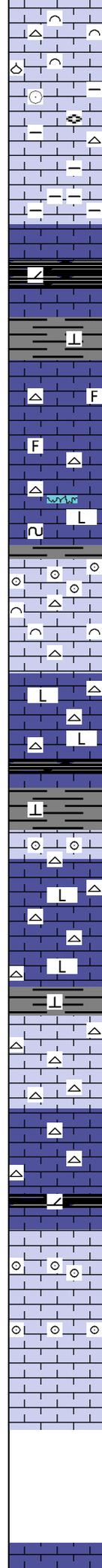
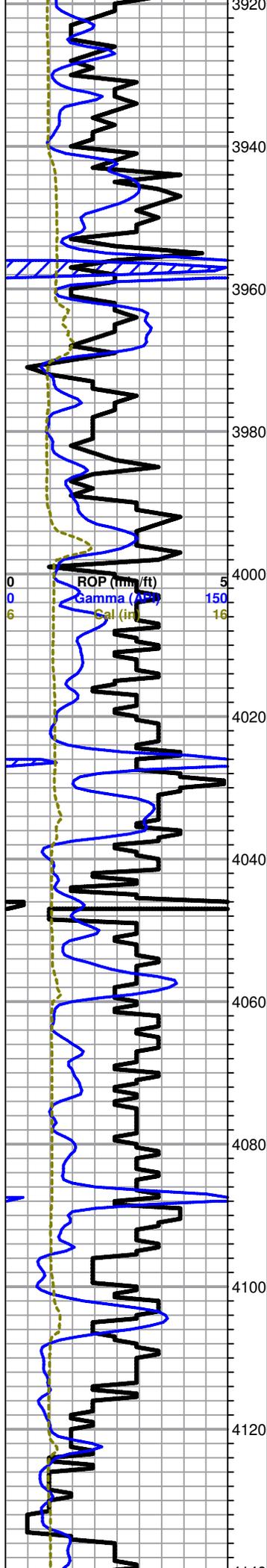
Limestone: tan to brown, tr fossil frags, vf- to micro-xln matrix, layers of brownish-gray shale, tr arg in darker frags, wackestone, no shows. Tr white, vitreous chert.

Limestone: grayish-tan, tr fossil frags set in a vf-xln matrix, wackestone, chalky, tr arg., fair porosity, no shows.

Limestone: lt tan to tan, more fossiliferous than above, recognizable crinoids and fussioninids, set in f-xln matrix, packstone to wackestone, fair to weak porosity, no shows. Tr tan chert.

Limestone: tan to grayish-tan, f-xln-granular, fragmental fossil debris, grainstone, fair inter-xln porosity, no shows. Tr vy lt gray chert, weathered/frosted. Tr pyrite.

Connections started pulling tight at 3827', resulting in cavings being knocked into the samples.



Limestone: tan to lt brown, fragmental-fossiliferous, brach., f-us-sulinids, f-xln to vf-xln matrix, packstone, no shows, tr lt gray chert.

Limestone: tan to lt brown, argillaceous, fossil debris, f-us-sulinids, crinoids, vf-xln matrix, packstone thin brownish-gray shale laminations, no shows.

Limestone as above, soft and chalky, streaks of shale. Becomes micritic w/ depth.

Heebner 3956 (-1118)

Shale: black, carbonaceous, dolomitic, soft.

Shale: gray, calc, thinly-laminated w/ various shades of gray, soft.

Toronto 3970 (-1132)

Limestone: cream, vf-xln to micritic, some finely succrosic, tr fossil frags, tr secondary porosity, mudstone, no shows, tr cream to vy lt gray vitreous chert.

Limestone: cream, micro- to crypto-xln w/ sparry calcite patches, lithographic micrite, tr porosity in the crs-xln spar, no shows. Tr stylolites, tr glauconite.

Lansing 3998 (-1160)

Limestone: cream to tan, well-cemented oolitic grainstone to fragmental-fossiliferous grainstone, med-xln, weak porosity, no shows. Chert: white to vy lt gray, vitreous, fossiliferous, spicular.

Limestone: cream to lt tan, recrystallized grainstone w/ fair inter-xln porosity to clean, crypto-xln micrite. Chert: vy lt gray, fossiliferous, spicular. No shows.

Limestone: cream, lithographic micrite w/ large sparry xls, no shows. Tr black carbonaceous shale.

Limestone: cream to tan, well-cemented oolitic grainstone to re-xlized fossiliferous grainstone, tight, no shows. Tr light vitreous chert. Shale: gray, calc, fissile, flakey.

Limestone: tan, micro- to crypto-xln mudstone, tight, except for the random sparry calcite patches, no shows. Chert as above.

Shale: gray, soft, calc, dominates the sample.

Limestone: lt tan, recrystallized grainstone w. fair porosity, no shows.

Sample is flooded w/ cavings.

Limestone: cream, succrosic w/ a few remnant fossil frags, fair inter-xln porosity, chert is part of the ls frags, grainstone, no show.

Limestone: tan, micro-xln, micro-succrosic, mudstone, tight, no shows, Chert as above, vy lt gray, vitreous.

Tr black carbonaceous shale, dolomitic.

Limestone: cream to white, recrystallized grainstone, faint ghost fossil frags, med- to coarse-xln, good inter-xln porosity, no shows. Some micrite.

Limestone: tan to mottled tan and reddish-brown, oolitic grainstone. Oolites are tan to reddish-brown, tr of fossil frags, tr sparry calcite, fair porosity to tight, no shows.

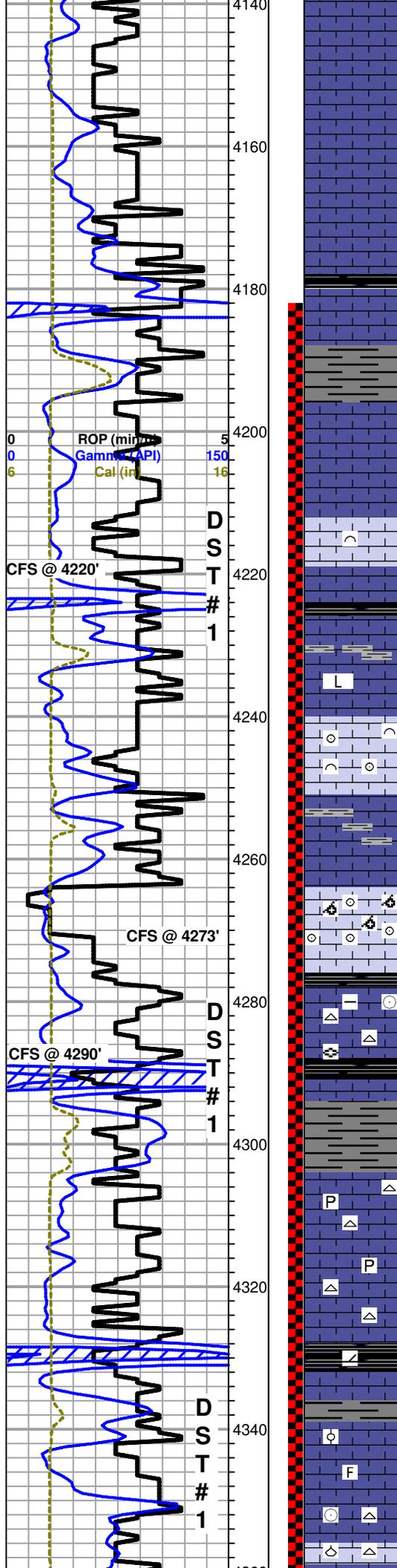
Limestone: tan to mottled red and tan, indicating an exposure surface, altered former packstone, tr of ghost fossils, fair secondary porosity, no shows.

Bad sample! Flooded with cavings.

Should be oolitic grainstone.

Bad sample! Flooded with cavings.

0	Total Gas (units)	50
0	C1 (units)	50
0	C2 (units)	50
0	C3 (units)	50
0	C4 (units)	50



Limestone: cream to lt tan, vy-finely succrosic, tight, mudstone, no shows. Tr sparry calcite.

Limestone: cream to tan, micro- to crypto-xln mudstone as above. No shows.

Muncie Creek 4178 (-1340)

Shale: black, carbonaceous, dolomitic.

Limestone: tan to brown, micro- to crypto-xln, tr micro fossil frags, mudstone to micrite, tight, no shows.

Mudstone and micrite as above.

Limestone: cream to tan, mostly mudstone w/ some crs-xln, fossiliferous grainstone, weak porosity, no shows.

No cuttings in the sample box for the 60 min sample.

Tr black carbonaceous shale.

Limestone: tan micrite, w/ brownish-gray shale laminations.

Limestone: tan and brown mottled, lithographic micrite, crypto-xln matrix w/ sparry calcite patches, fair inter-xln porosity, no shows.

Limestone: tan, tr fossiliferous, f-xln matrix, oolites, packstone, weak porosity, no shows.

Credo K Clark 1-15 dst 1 p.10001.jpg

Limestone: cream to tan, f-xln, tr fossils, thin shale laminations, tr secondary porosity w/ spotty oil staining in one frag, bright yellow fluor, weak cut is enhanced with HCl. Faint oil aroma in sample cup.

Limestone: lt tan mottled w/ tan to lt brown oolites, f-xln cement, oolitic grainstone w/ good oomoldic porosity, no aroma, no shows.

Limestone: tan to gray, some are gray mottled w/ tan fossil frags, fussulinids, crinoids, some frags are arg, packstone to wackestone, faint aroma, but no shows. Tr black shale. Lt gray chert.

Stark Shale 4288 (-1450)

Shale: black, carbonaceous, dolomitic, firm, blocky.

Shale: gray, non-calc, soft, flakey.

Limestone: lt gray to lt grayish-tan, micro- to crypto-xln, mudstone, tight, no shows. Tr pyrite.

Limestone: cream to tan, micro- to crypto-xln, tr fossil frags, tr pyrite, mudstone, tight, no shows, tr chert: white to lt gray, translucent, vitreous.

Hushpuckney 4328 (-1490)

Shale: black, carbonaceous, dolomitic, firm, blocky.

Limestone: cream to tan, tr fossil frags, tr random oolites, set in a micro-xln matrix, mudstone, tight, no shows.

Limestone: tan, free-floating fossils set in a micro-xln matrix, some crinoids altered to white chert within sample chips, mudstone, tight, no shows.

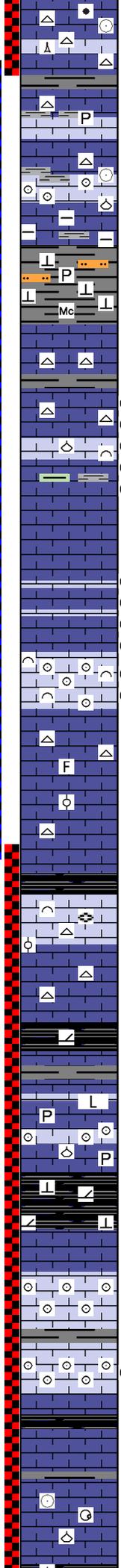
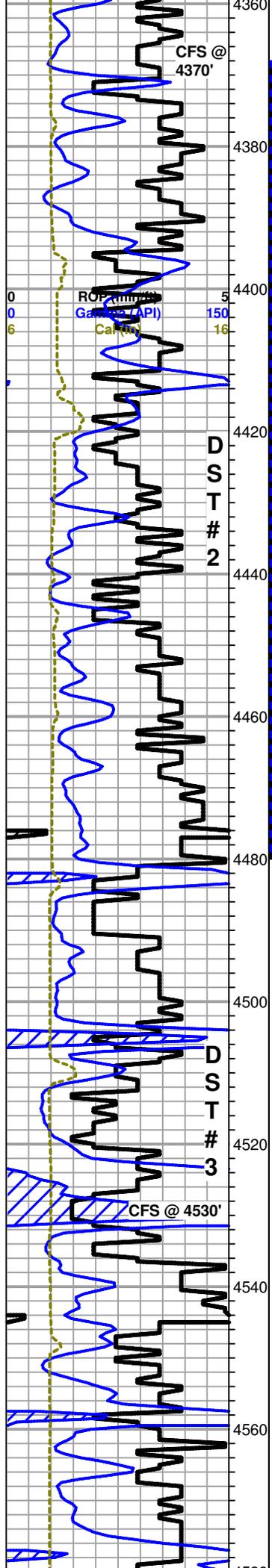
Limestone: cream to tan, fossiliferous, brach, crinoid frags, spicules, random pellets and oolites, vf- to coarsely-xln, packstone to mudstone, tight, no shows. Observed the presence of fossiliferous

0	Total Gas (units)	50
0	C1 (units)	50
0	C2 (units)	50
0	C3 (units)	50
0	C4 (units)	50

Mud-Co, Mud check
 4230' @ 1535 hrs.
 10/21/2012
 Vis. 42, Wt. 9.5 PV
 10, YP 14
 WL 14.4, Cake 2/32"
 pH 7.5, Ca 240 ppm
 CHL 2,600 ppm
 Sol 8.3, LCM 2
 DMC: \$2,439.25
 CMC: \$12,088.80

Sample quality diminished
 from 4230-4360'. Mud
 system was altered to get
 better samples after 4370'.

Mud-Co, Mud check
 4370' @ 0805 hrs.
 10/22/2012
 Vis. 63, Wt. 9.35
 PV 18, YP 24
 WL 7.6, Cake 1/32"
 pH 9.5, Ca 40 ppm
 CHL 2,900 ppm
 Sol 7.7, LCM 4
 DMC: \$2,459.80



Base Kansas City 4370 (-1532)

Limestone: lt grayish-tan, micro-xln w/ very few fossil frgs, mudstone, tight, no shows. Tr fossiliferous chert. Tr thin brown shale laminations. Tr pyrite. Some frags w/ oolites.

Limestone: tan to brown, bioclastic, oolitic packstone, crinoids, spicules, brach., becomes increasingly shaley and argillaceous w/ depth. Tight, no shows.

Shaley limestone and shale: gray, silty, organic debris, micaceous, calcareous. Tr pyrite.

Marmaton 4405 (-1567)

Limestone: tan fossiliferous/fragmental, some large fossil frags, set in a vf- to micro-xln matrix, inter-layered w/ gray to brown shale. Tr oolitic chert.

Limestone: tan to lt brown, fossil frags set in a crypto-xln matrix, secondary porosity w/ succrosic-lined fractures and possible micro-vugs, spotty live oil staining, fair cut w/ bright bluish-yellow fluor., oil aroma in sample cup.

Limestone as above w/ oil staining in secondary fractures and inter-xln secondary porosity, tr lt green shale coatings, sli arg ls, wackestone to packstone. Tr. brach.

No sample @ 4440-50'

Credo K Clark 1-15 dst 2 p.10001.jpg

Limestone: tan, micro-xln mudstone, secondary porosity developed along fractures and micro-vugs lined w/ succrosic calcite xls, spotty live oil staining in porosity, bright yellow fluor, good cut, fair aroma.

Limestone: cream to tan, bioclastic, f-xln, crinoids, good secondary inter-xln porosity w/ free live oil and instant cut. Oolitic grainstone.

Altamont 4460 (-1622)

Limestone: cream to tan, sli fossiliferous, tr oolites, micro-xln, tight mudstone, no shows. Chert: white to lt gray, fossiliferous, spicules, vitreous.

Limestone: tan, crypto-xln, lithographic micrite, Ghost fossils and oolites, tight, no shows. Same chert.

Pawnee 4485 (-1647)

Shale: black, carbonaceous, dolomitic, soft.

Limestone: cream, recrystallized grainstone, tr oolites, remnant fossils, fussulinids, most is finely succrosic, fair secondary pinpoint porosity, no shows. Chert: white, fossiliferous, vitreous. Becomes micritic w/ depth.

Shale: black, carbonaceous, dolomitic, soft.

Ft. Scott 4507 (-1669)

Limestone: tan to brown, arg., fossiliferous to barren, med-xln to crypto-xln, wackestone to lithographic micrite, brach frags, pyrite, weak inter-xln porosity, no shows. Tr brown, arg., pyritic oolitic grainstone. Brachiopods,

Cherokee 4524 (-1686)

Shale: black, carbonaceous, dolomitic to calcareous, blocky and firm to fissile and soft.

Limestone: tan to tan mottled w/ brown oolites 0.1-0.75mm in dia., oolitic grainstone, vf-xln matrix, some oolites are loose and fall out easily from the matrix, others are well-cemented, tr porosity in the cement, one frag has oil staining in the crystalline cement, slow cut.

Credo K Clark 1-15 dst 3 p.10001.jpg

Sample quality has deteriorated once again. Samples are flooded with cavings, dominated by Permian red beds.

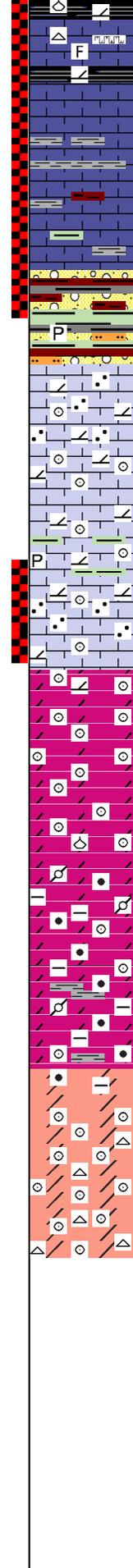
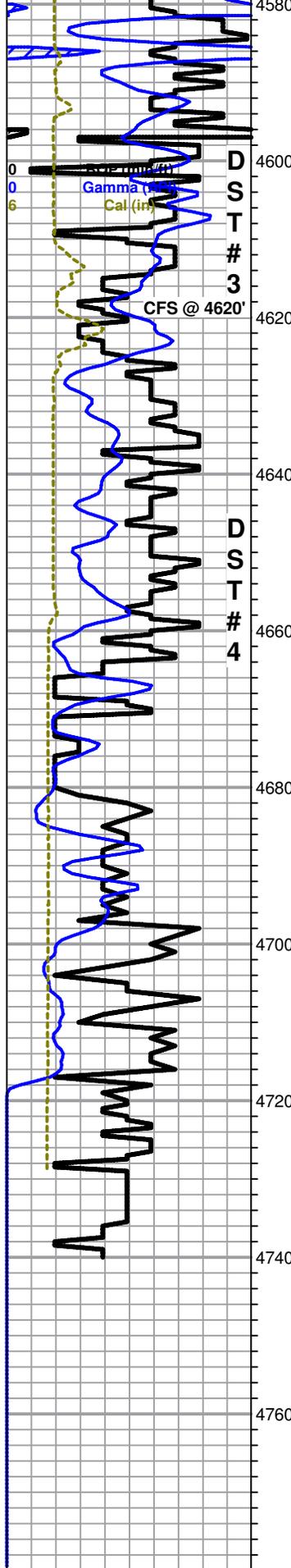
Limestone: dark tan bioclastic packstone to brown micrite, brach., crinoids, gastropods, no shows.

CMC: \$14,548.60

Mud-Co, Mud check
4378' @ 1910 hrs.
10/22/2012
Vis. 78, Wt. 9.2 PV
19, YP 23
WL 7.2, Cake 1/32"
pH 9.0, Ca 20 ppm
CHL 3,500 ppm
Sol 6.3, LCM 5
DMC: \$3,441.75
CMC: \$15,530.55

0	Total Gas (units)	50
0	C1 (units)	50
0	C2 (units)	50
0	C3 (units)	50
0	C4 (units)	50

Mud-Co, Mud check
4480' @ 1100 hrs.
10/23/2012
Vis. 56, Wt. 9.3 PV
19, YP 22
WL 7.6, Cake 1/32"
pH 9.0, Ca 20 ppm
CHL 1,400 ppm
Sol 7.0, LCM 4
DMC: \$1,084.40
CMC: \$16,614.95



Shale: black, carbonaceous, calcareous, brachiopod impressions.
 Limestone: lt tan, crypto-xln, lithographic micrite, tight, no shows. Tr chert, vitreous, fossiliferous, stylolites.

Johnson 4598 (-1760)

Limestone: cream to tan to brown, darker frags are argillic, thin layers of reddish-brown shale, some oolitic grainstone, some mudstone. Tr lt green shale.

Conglomerate: lt green shale and siltstone, striped gray and tan shale, pyritic, lt green siltstone is thinly laminated in gray shale. Red shale w/ pyrite.

Mississippian 4626 (-1788)

Limestone: cream, dolomitic, arenaceous, tr pinkish-tan oolites, fine-grained sub-rounded quartz grains. Tight, no shows.

Limestone: cream to lt tan, dolomitic, oolitic grainstone, oolites 0.2-0.5mm in dia., weak porosity, no shows.

Credo K Clark 1-15 dst 4 p.10001.jpg

4660-4670': Limestone: lt tan to tan, oolitic grainstone, tr pyrite, tr irregular lt green shale laminations, tr gray shale lams. Arenaceous limestone w/ dark streaks of oil, and spotty oil staining in other arenaceous frags, good streaming cut w/ bright yellow fluor.

Limestone: tan to brown, oolitic grainstone, dolomitic, tr pyrite. Shale: lt green, soft, waxy, pyritic in parts, black organic streaks in some frags, also forms thin coatings on some frags.

30 min: dolomite: brown, well-cemented to porous oolitic grainstone. Fair inter-xln porosity in the cement. No shows.

Dolomite: brown, oolitic grainstone, weak inter-xln porosity in the cement, no shows. Tr brachiopods.

Dolomite: as above w/ crypto-xln micrite.

Dolomite: brown to mottled brown and gray pelletal argillaceous packstone, still a fair amount of oolitic grainstone, weak porosity, no shows.

Dolomite as above w/ a few thin dark gray shale laminations.

Dolomite: brown to brown and gray mottled, pellets, oolites, fossil frags, argillaceous, thin irregular streaks of dark gray shale, well-cemented, packstone, no shows.

Dolomite: tan, oolitic grainstone, partially recrystallized, fair porosity, no shows. Chert: white to milky, translucent, ghost oolites, vitreous.

RTD 4740 (-1902)

RTD 4740' @ 0710 hrs, 10/25/2012
Pioneer Wireline Services LTD 4740'
Completed Logging Operations @ 1600 hrs
Geologist: Charlie Sturdavant off location
@ 1615 hrs 10/25/2012

Vis: 56,
 Wt.: 9.3

0	Total Gas (units)	50
0	C1 (units)	50
0	C2 (units)	50
0	C3 (units)	50
0	C4 (units)	50

Mud-Co, Mud check
4620' @ 1100 hrs.
 10/24/2012
 Vis. 64, Wt. 9.4 PV
 21, YP 20
 WL 8.8, Cake 1/32"
 pH 9.5, Ca 20 ppm
 CHL 1,400 ppm
 Sol 7.7, LCM 5
 DMC: \$1,043.35
 CMC: \$17,658.30

Mud-Co, Mud check
4740' @ 0920 hrs.
 10/25/2012
 Vis. 50, Wt. 9.35
 PV 17, YP 18
 WL 7.6, Cake 1/32"
 pH 10.0, Ca 20 ppm
 CHL 2,000 ppm
 Sol 7.7, LCM 3
 DMC: \$319.05
 CMC: \$17,977.35

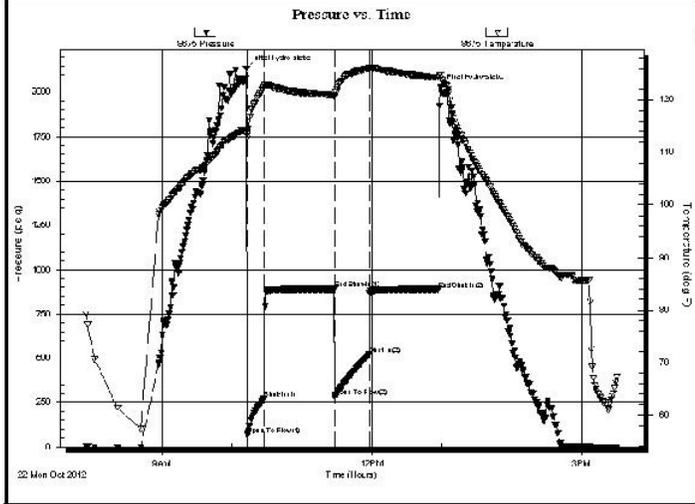
 TRILOBITE TESTING, INC.	<h2 style="margin: 0;">DRILL STEM TEST REPORT</h2> <p>Credo Petroleum Corporation 15-19s-29w Lane Co. KS</p> <p>1801 Braodway # 900 K Clark #1-15 Denver CO 80202-3858</p> <p>ATTN: Charles Sturdavant Job Ticket: 48910 DST#: 1</p> <p>Test Start: 2012.10.22 @ 07:55:00</p>
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GENERAL INFORMATION:

Formation: Kansas City	Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)	Tester: Jace McKinney
Time Tool Opened: 10:13:30	Unit No: 46
Time Test Ended: 15:31:00	Reference Elevations: 2838.00 ft (KB)
Interval: 4182.00 ft (KB) To 4370.00 ft (KB) (TVD)	2827.00 ft (CF)
Total Depth: 4370.00 ft (KB) (TVD)	KB to GR/CF: 11.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair

Serial #: 8675 Inside	Capacity: 8000.00 psig
Press@RunDepth: 520.27 psig @ 4183.00 ft (KB)	Last Calib.: 2012.10.22
Start Date: 2012.10.22 End Date: 2012.10.22	Time On Btm: 2012.10.22 @ 10:12:15
Start Time: 07:55:15 End Time: 15:31:00	Time Off Btm: 2012.10.22 @ 12:59:15

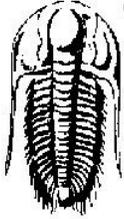
TEST COMMENT: B.O.B. in 4 min.
 Bled off for 5 min. No return blow
 B.O.B. in 5 1/2 min.
 Bled off for 5 min. No return blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2134.36	114.22	Initial Hydro-static
2	68.19	113.61	Open To Flow (1)
16	275.35	122.46	Shut-In(1)
76	889.27	120.96	End Shut-In(1)
76	285.95	120.54	Open To Flow (2)
106	520.27	126.05	Shut-In(2)
165	888.71	124.34	End Shut-In(2)
167	2027.88	124.64	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
234.00	ocmw 5%O 20%M 75%W	1.15
680.00	ocgmw 5%O 5%G 40%M 50%W	9.53
186.00	w cm 5% W 95%M	2.61

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Credo Petroleum Corporation
 1801 Braodway # 900
 Denver CO 80202-3858
 ATTN: Charles Sturdavant

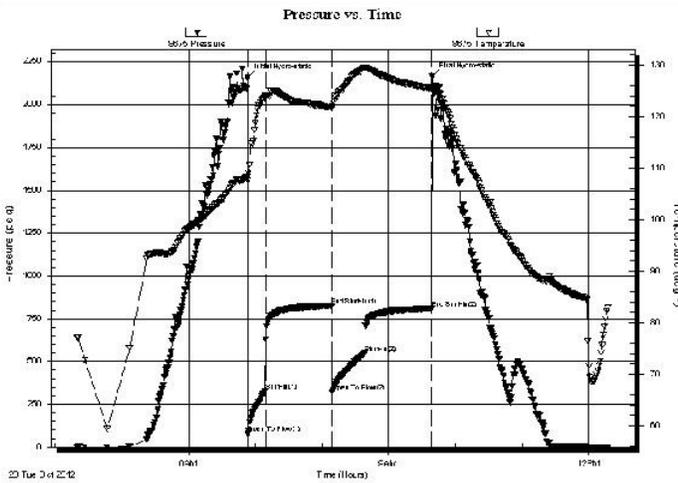
15-19s-29w Lane Co. KS
K Clark #1-15
 Job Ticket: 48911 **DST#: 2**
 Test Start: 2012.10.23 @ 04:20:00

GENERAL INFORMATION:

Formation: **Marmaton**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:53:45
 Time Test Ended: 12:17:15
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jace McKinney
 Unit No: 46
Interval: 4368.00 ft (KB) To 4480.00 ft (KB) (TVD)
 Total Depth: 4480.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Reference Elevations: 2838.00 ft (KB)
 2827.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8675 Inside
 Press@RunDepth: 546.99 psig @ 4369.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.10.23 End Date: 2012.10.23 Last Calib.: 2012.10.23
 Start Time: 04:20:15 End Time: 12:17:15 Time On Btm: 2012.10.23 @ 06:53:30
 Time Off Btm: 2012.10.23 @ 09:39:15

TEST COMMENT: B.O.B. in 3 1/2 min.
 Bled off for 5 min. No return blow
 B.O.B. in 5 min.
 Bled off for 5 min. No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2160.33	108.35	Initial Hydro-static
1	78.80	107.64	Open To Flow (1)
16	327.48	123.93	Shut-In(1)
76	825.85	121.83	End Shut-In(1)
76	321.96	121.63	Open To Flow (2)
106	546.99	129.48	Shut-In(2)
165	808.62	125.51	End Shut-In(2)
166	2164.29	125.58	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
544.00	mcw with oil scum 20%M 80%W	5.49
586.00	w cm with oil scum 30%W 70%M	8.22

Gas Rates

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

* Recovery from multiple tests

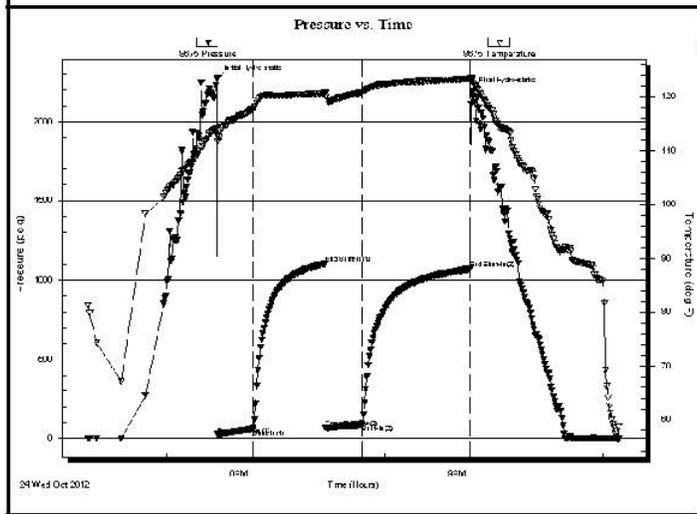
 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT	
	Credo Petroleum Corporation 1801 Braodway # 900 Denver CO 80202-3858 ATTN: Charles Sturdavant	15-19s-29w Lane Co. KS K Clark #1-15 Job Ticket: 48912 DST#: 3 Test Start: 2012.10.24 @ 03:55:00

GENERAL INFORMATION:

Formation: Cherokee Deviated: No Whipstock: ft (KB) Time Tool Opened: 05:41:45 Time Test Ended: 11:13:15	Test Type: Conventional Bottom Hole (Reset) Tester: Jace McKinney Unit No: 46
Interval: 4478.00 ft (KB) To 4620.00 ft (KB) (TVD) Total Depth: 4620.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair	Reference Elevations: 2838.00 ft (KB) 2827.00 ft (CF) KB to GR/CF: 11.00 ft

Serial #: 8675	Inside				
Press@RunDepth:	90.48 psig @	4479.00 ft (KB)	Capacity:	8000.00 psig	
Start Date:	2012.10.24	End Date:	2012.10.24	Last Calib.:	2012.10.24
Start Time:	03:55:15	End Time:	11:13:15	Time On Btm:	2012.10.24 @ 05:41:30
				Time Off Btm:	2012.10.24 @ 09:12:30

TEST COMMENT: Built to 2 1/2" blow
 No return blow
 No blow
 No return blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2271.31	114.14	Initial Hydro-static
1	26.21	112.74	Open To Flow (1)
30	60.55	117.77	Shut-In(1)
90	1104.65	120.66	End Shut-In(1)
90	64.50	119.94	Open To Flow (2)
120	90.48	120.80	Shut-In(2)
209	1070.56	123.37	End Shut-In(2)
211	2192.77	122.92	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
120.00	100% Mud	0.59

* Recovery from multiple tests

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

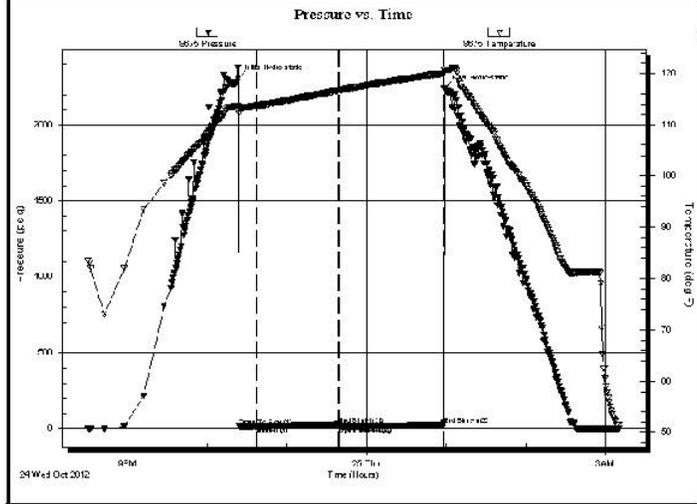
 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT	
	Credo Petroleum Corporation 1801 Braodway # 900 Denver CO 80202-3858 ATTN: Charles Sturdavant	15-19s-29w Lane Co. KS K Clark #1-15 Job Ticket: 48913 DST#: 4 Test Start: 2012.10.24 @ 20:30:00

GENERAL INFORMATION:

Formation: Miss	Test Type: Conventional Straddle (Reset)
Deviated: No Whipstock: ft (KB)	Tester: Jace McKinney
Time Tool Opened: 22:23:45	Unit No: 46
Time Test Ended: 03:10:00	Reference Elevations: 2838.00 ft (KB)
Interval: 4651.00 ft (KB) To 4664.00 ft (KB) (TVD)	2827.00 ft (CF)
Total Depth: 4680.00 ft (KB) (TVD)	KB to GR/CF: 11.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair

Serial #: 8675	Inside	Capacity: 8000.00 psig
Press@RunDepth: 18.55 psig @ 4652.00 ft (KB)	Start Date: 2012.10.24	End Date: 2012.10.25
Start Time: 20:30:15	End Time: 03:10:00	Last Calib.: 2012.10.25
		Time On Btm: 2012.10.24 @ 22:23:15
		Time Off Btm: 2012.10.25 @ 00:58:45

TEST COMMENT: Weak surface blow , Died in 15 min.
 No return blow
 No blow
 No return blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2308.60	113.59	Initial Hydro-static
1	17.74	112.16	Open To Flow (1)
14	18.18	113.64	Shut-In(1)
76	30.15	116.67	End Shut-In(1)
76	17.44	116.68	Open To Flow (2)
91	18.55	117.39	Shut-In(2)
155	27.03	119.99	End Shut-In(2)
156	2237.30	120.65	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	100% Mud	0.02

* Recovery from multiple tests

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